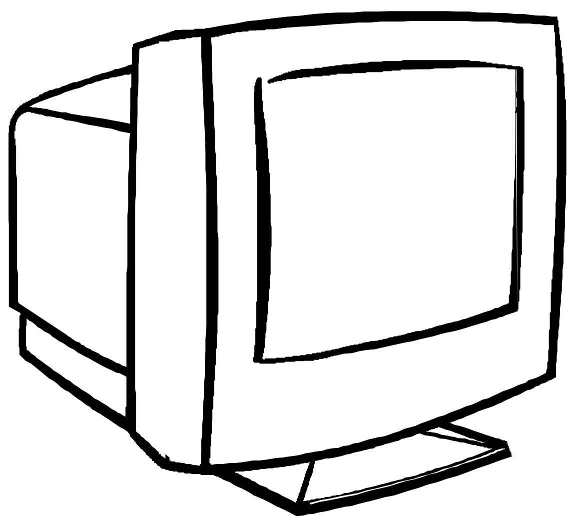
SERVICE MANUAL

COLOR MONITOR

E551C SERIES (D556Q)



THESE DOCUMENTS ARE FOR REPAIR SERVICE INFORMATION ONLY. EVERY REASONABLE EFFORT HAS BEEN MADE TO ENSURE THE ACCURACY OF THIS MANUAL.WE CANNOT GUARANTEE THE ACCURACY OF THIS INFORMATION AFTER THE DATE OF PUBLICATION AND DISCLAIMS LIABILITY FOR CHANGES, ERRORS OR OMISSIONS,

MANUFACTURE DATA : MAY. 2001

TABLE OF CONTENTS

1. SPECIFICATIONS FOR D556P COLOR MONITOR

1. CRT
   38cm(15V) 90 Deflection, 29mm Neck, 0.28mm Dot Pitch, Non-Glare Screen

2. Viewable image Size: 35cm (13.8") diagonal

3. Display Color: Unlimited Colors

4. External Controls:
   Power On/Off, UP/Down key, Function key: Contrast, Brightness, H-Size, H-Center, V-Size, V-Center, Pincushion, Trapezoid

5. Input Video Signal

	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Mode 7
	RGB Analog	RGB Analog	RGB Analog	RGB Analog	RGB Analog	RGB Analog	RGB Analog
Horiz. Sync:	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level
	Negative	Negative	Negative	Negative	Positive	Positive	Negative
Vert. Sync:	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level	TTL Level
	Positive	Negative	Negative	Negative	Positive	Positive	Negative

6. Resolution

Horizontal:	720 (H)	640 (H)	640 (H)	640 (H)	800 (H)	800 (H)	1024 (H)
Vertical :	400 (V)	480 (V)	480 (V)	480(V)	600(V)	600 (V)	768 (V)
Fh (KHz):	31.5	31.5	37.5	43.3	46.8	53.7	48.4
Fv (Hz) :	70	60	75	85	75	85	60

7. Display Size
   Horizontal: 270 mm
   Vertical: 202 mm

8. Scanning Frequencies
   Horizontal: 30KHz ~ 54KHz
   Vertical: 50 Hz ~ 120 Hz

9. Factory Preset Timings: 7
   User Timings: 12

10. Misconvergence
    Center: 0.3 mm Max.
    Corner: 0.35 mm Max.

11. Video dot rate: 65 MHz

12. Power Source:
    Switching Mode Power Supply
    AC 100 ~240V, 50/60Hz Universal Type

13. Operating Temperature: 0℃ to 40℃ Ambient

14. Humidity:
    10 to 85 Relative, Non-Condensing

15. Weight: 12.5kg(Net), 14.5kg(Gross)

16. Dimensions Monitor:
    Carton: 460(W) × 425(H) × 494(D)
    Monitor: 360(W) × 364(H) × 385(D)

17. External Connection:
    15 Pin D-type Connector
    AC Power Cord

18. Regulations:UL, CSA, FCC, TÜV/GS, CE , MPR II

2. PRECAUTIONS AND NOTICES

2-1 SAFETY PRECAUTIONS

1. Observe all caution and safety related notes located inside the display cabinet.

2. Operation of the display with the cover removed, may cause a serious shock hazard from the display power supply. Work on the display should not be attempted by anyone who is not thoroughly familiar with precautions necessary when working on high voltage equipment.

3. Do not install, remove or handle the picture tube in any manner unless shatter-proof goggles are worn. People who are not so equipped should be kept away while handling picture tube. Keep picture tube away from the body while handling.

4. The picture tube is constructed to limit X-RAY radiation to 0.5 mR/HR. For continued protection, use the designated replacement tube only, and adjust the voltages so that the designated maximum rating at the anode will not be exceeded.

5. Before returning a serviced display to the customer, a thorough safety test must be performed to verify that the display is safe to operate without danger or shock. Always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as screw heads.
   Test method for current leakage is described as follow.

   (a) Plug the AC line cord directly into rated AC outlet (do not use a line isolation transformer during this check).

   (b) Use an AC voltmeter having 5000 ohms per volt or with more sensitivity in the following manner: Connect a 1500 ohms 10 Watt resistor, paralleled by a 0.15UF, AC type capacitor between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts simultaneously. Measure the AC voltage across the combination of 1500 ohms resistor and 0.15UF capacitor.

   (c) Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part.

   (d) Voltage measured must not exceed 0.5 volts RMS. This corresponds to 0.35 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

2-2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-RAY radiation or other hazards.

2-3 SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.

2. When replacing a high wattage resistor (more than 1/2W of metal oxide film resistor) in circuit board, keep the resistor about 10 (1/2 in) away from circuit board.

3. Keep wires away from high voltage or high temperature components.

4. Keep wires in their original position so as to reduce interference.

2-4 HIGH VOLTAGE WARNING

Operation of monitor outside of cabinet or with back removed may cause a serious shock hazard. Work on this model should only be performed by those who are thoroughly familiar with precautions necessary when working on high voltage equipment.

Exercise care when servicing this chassis with power applied. Many B plus and high voltage terminals are exposed which, if carelessly contacted, can cause serious shock or result in damage to the chassis. Maintain interconnecting ground lead connections between chassis and picture tube dag when operating chassis.

Certain HV failures can increase X-ray radiation. Monitor should not be operated with HV levels exceeding the specified rating for the chassis type. The maximum operating HV specified for the chassis used in this monitor is

24.0KV ± 1KV

with a line voltage of 120/240 VAC. Higher voltage may also increase possibility of failure in HV supply.

It is important to maintain specified values of all components in the horizontal and high voltage circuits and anywhere else in the monitor that could cause a rise in high voltage or operating supply voltages. No changes should be made to the original design of the monitor. Components shown in the shaded areas on the schematic should be replaced with exact factory replacement parts. The use of unauthorized substitute parts may create a shock, fire or other hazard.

To determine the presence of high voltage, use an accurate, high impedance, HV meter connected between second anode lead and CRT dag grounding device. When servicing the High Voltage System, remove static charge from it by connecting a 10K ohm resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead.(AC line cord disconnected from AC power outlet.)

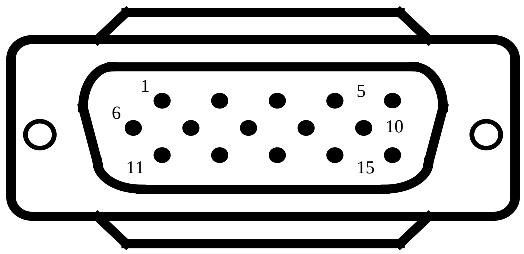
The picture tube used in this monitor employs integral implosion protection. Replace with tube of the same type number for continue safety. Do not lift picture tube by the neck. Handle the picture tube only after discharging the high voltage completely.

3. OPERATING INSTRUCTIONS

This procedure gives you instructions for installing and using the E55lc display.

1. Position the display on the desired operation and plug the power cord into a convenient AC outlet. Three-wire power cord must be shielded and is provided as a safety precaution as it connects the chassis and cabinet to the electrical conduit ground. If the AC outlet in your location does not have provisions for the grounded type plug, the installer should attach the proper adapter to ensure a safe ground potential.

2. Connect the 15-pin color display shielded signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:



15 - Pin Color Display
Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	RED	9.	NC
2.	GREEN	10.	GND
3.	BLUE	11.	SYNC. GND
4.	GND	12.	SDA
5.	GND	13.	HORIZ. SYNC
6.	GND-R	14.	VERT. SYNC (* VCLK)
7.	GND-G	15.	SCL
8.	GND-B		

3. Apply power to the display by turning the power switch to the "ON" position and allow about thirty seconds for display tube warm-up. The Power-On indicator lights when the display is on.

4. With proper signals feed to the display, a pattern or data should appear on the screen, adjust the brightness and contrast to the most pleasing display.

5. This monitor has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC.

6. If your E55lc color display requires service, it must be returned with the power cord.

4. ADJUSTMENT

4-1 ADJUSTMENT CONDITIONS AND PRECAUTIONS

1. Approximately 30 minutes should be allowed for warm up before proceeding.
2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.

4-2 MAIN ADJUSTMENTS

NO.	FUNCTION	LOCATION	DESIGNATION
1.	15V ADJ	PCB - MAIN	VR901
2.	B + ADJ	PCB - MAIN	VR902
3.	R.B. DRIVE	CRT - BOARD	VR801,802
4.	R.G.B. CUT-OFF	CRT - BOARD	VR803,804,805
5.	ABL ADJ	PCB - MAIN	VR701
6.	UP KEY	PCB - MAIN	SW101
7.	DOWN KEY	PCB - MAIN	SW102
8.	FUNCTION KEY	PCB - MAIN	SW103

4-3 ADJUSTMENT METHOD

1. 15V, B + & HV protection voltage adjustment:
   A. Chroma-2000 Signal generator or PC equivalent, set mode 2(VGA 640 × 480) pattern 1.
   B. Connect a DC voltage meter between TP 901 and ground, then adjust VR901 to be 15VDC.
   C. Connect a DC voltage meter between TP 902 and ground, then adjust VR902 to be 86 VDC.

2. Factory preset timings adjustment:
   A. When you turn on the monitor, the function LEDS will light up simultaneously for a while, then extinguish.
   B. You can press the up/func two keys simultaneously, the most left four LEDS will light up for a while then extinguish.
   C. Then you can select one of the eight functions including Contrast, Brightness, H-SIZE, H-CENTER, V-SIZE, V-CENTER, Pincushion and Trapezoid Simply press the function key and the LED will be light up corresponding to the one selected, then press the up/down keys to get the factory presetting parameter value to your satisfaction.
   D. Then you will press the up/function two keys simultaneously again, the most right four LEDS will light up for a while then extinguish, the factory preset timings adjustment is finished.

3. White balance and luminance adjustment:

   A. Bias (low light) adjustment:
      (a) Set mode 5 (800 × 600 Fh: 46.8KHz) full white pattern.
      (b) Adjust VR801, 802, 803, 804, 805, to make VR in the center position.
      (c) Warm up more than 20 minute.
      (d) Brightness set to max. Contrast set to min. full white pattern, then adjust FBT screen VR to make Y= 2.2±0.3cd/m².
      (e) Brightness set to raster just cutoff, contrast set to 14cd/m², then adjust CRT board VR805 (B-Bias) VR803 (R-Bias) to make Y= 14 ± 2cd/m², x= 283 ± 10, y= 297 ± 10
   B. Gain (High light) adjustment:
      (a) Set mode 5 (800 × 600 Fh: 46.8KHz) full white pattern.
      (b) Brightness set to raster just cutoff and set the cantrast to max.
      (c) Adjust VR801, 802 to make color code x=283 ± 10, y=297 ± 10.
   C. Recheck item A&B to make sure both of them in spec.

D. Full white luminance:
   (a) Set mode 5 (800 × 600 Fh: 46.8K) full white pattern.
   (b) Image size : H:270±4mm, V:202±4mm.
   (c) Brightness set to raster just cut off and set the contrast to max.
   (d) Adjust VR701 to make sure white luminance at 113± 2cd/m².

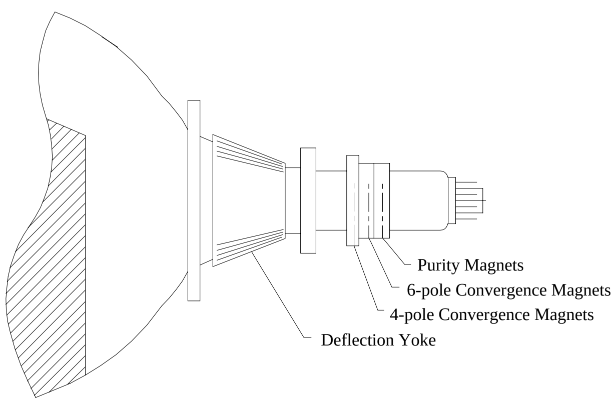
4. Focus adjustment:

   A. Set mode 2 (640 × 480 Fh: 31.5KHz) with character full page.
   B. Adjust external brightness to raster cutoff and external contrast to max. , then adjust focus VR to make the display be focused very well.

5. Purity adjustment

   A. Be sure that the display is not being exposed to any external magnetic fields.
   B. Ensure that the spacing between the Purity, Convergence, Magnet, (PCM), assembly and the CRT stem is 29 .(See below diagram)
   C. Produce a complete, red pattern on the display. Adjust the purity magnet rings on the PCM assembly to obtain a complete field of the color red. This is done by moving the two tabs in such a manner that they advance in an opposite direction but at the same time to obtain the same angle between the two tabs, which should be approximately 180.
   D. Check the complete blue and complete green patterns to observe their respective color purity. make minor adjustments if needed.

RELATIVE PLACEMENT OF TYPICAL COMPONENTS



6. Convergence adjustment

   A. Produce a magenta crosshatch on the display.
   B. Adjust the focus for the best overall focus on the display.
      Also adjust the brightness to the desired condition.
   C. Vertical red and blue lines are converged by varying the angle between the two tabs of the 4 pole magnets on the PCM assembly. (See above diagrams)
   D. Horizontal red and blue lines are converged by varying the two tabs together, keeping the angle between them constant.
   E. Produce a white crosshatch pattern on the display.
   F. Vertical green and magenta lines are converged by varying the angle between the two tabs of the 6-pole magnets.
   G. Horizontal green and magenta lines are converged by varying the two tabs together, keeping the angle between them constant.

5. CIRCUIT DESCRIPTION

5-1 MICRO CIRCUIT

IC101 is CPU, This CPU has the following functions.

1. Detect timing mode by sensing the horizontal frequency, vertical frequency, the polarity of Hor. Sync and Ver. Sync.
2. Key board scan control.
3. Geometry control internal D/A converters and I^2C bus control.
4. Cs capacitor switch control.
5. Power saving control.

When CPU detects a timing, it takes data from E^2PROM (IC102), then output voltage to control the geometry of this monitor.

If key is pressed, the CPU will do some job according to the key function. for example, if function key is pressed, it can change different value to control screen geometry (H-SIZE, V-SIZE.....etc.)

5-2 DEFLECTION CIRCUIT

Hor. sync. and Ver. sync., come from PC, go into the CPU (IC101). The output goes to the Hor. oscillation and Ver. oscillation processor (IC401). The IC401 treats sync. signal and output the drive signal to horizontal and vertical output circuit. IC401 also generates some functions for geometry use, like, horizontal center, vertical size, by I^2C bus control, the geometry can be controlled. IC601 is a vertical output IC to supply the vertical scan. Q404, Q405,Q406 and L405 are the horizontal size controls. Q403 is the horizontal deflection output, supply the horizontal scan of the monitor. Q707 and Q601 generate the Blanking signal output to G1 of CRT.

Q703 Q704 and Q705 are mute control, brightness control and G1 DC voltage output.

5-3 VIDEO CIRCUIT

IC801 is a video amplifier, clamping signal input from pin No. 11 to restore the DC voltage of video signal, the signal output from IC801 pass through IC802 Video package amplifier stage LM2439, then go to the cut off DC restore stage, The video output signal is about 40Vpp.

5-4 POWER SUPPLY

The design uses a discontinuous flyback topology operating in current-mode resulting in a multiple output switcher with stack well. faster diodes are used. The fast transient response of the control loop maintains picture integrity. Very fast current limiting protects the switcher agains short circuits.

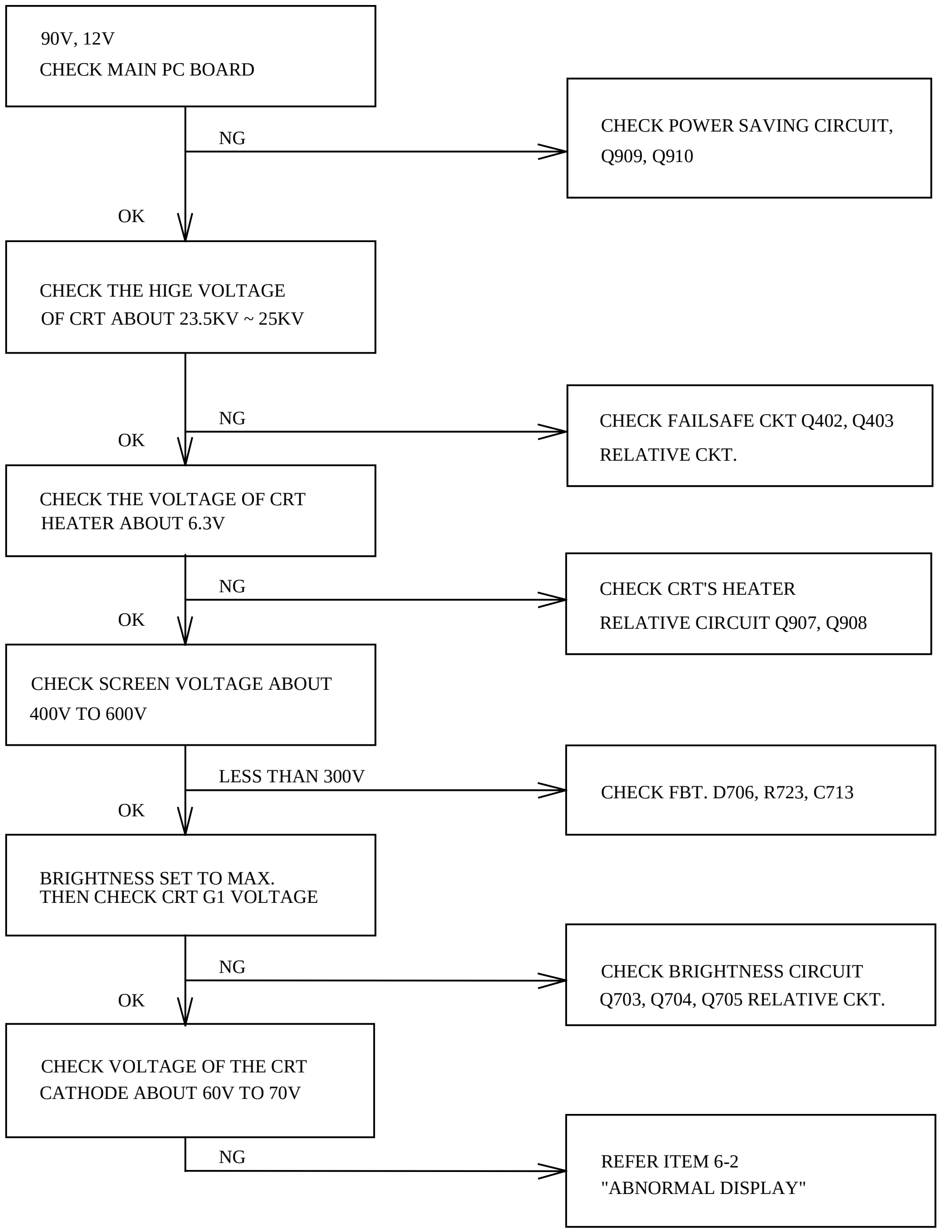
UC3842AM(IC901) is the current mode controller selected. It offers feed forward compensation, feedback error amplifier, and low voltage lock out features. The 3842 draws very little current is start up mode. There is enough power from the line bleeder to slowly charge a capacitor to the 16 volts needed to start the switcher.

The FET starts a cycle by allowing current to flow into the primary of the power transformer. As current ramps up with time, the voltage across the current sense resistor (R929) also ramps to a point where the 3842 determines that enough power is stored and turns off the FET. As the voltage on the transformer reverses, power is dumped from the main power transformer through diodes into the different supplies. To keep RFI to a minimum and reduce transistor heating, a turn-off snubber network is placed across the FET. Current from the secondary windings are rectified and filtered to freate the desired voltages. Small high current capacitors quickly return charging current to the source. Filter inductors remove high frequency noise.

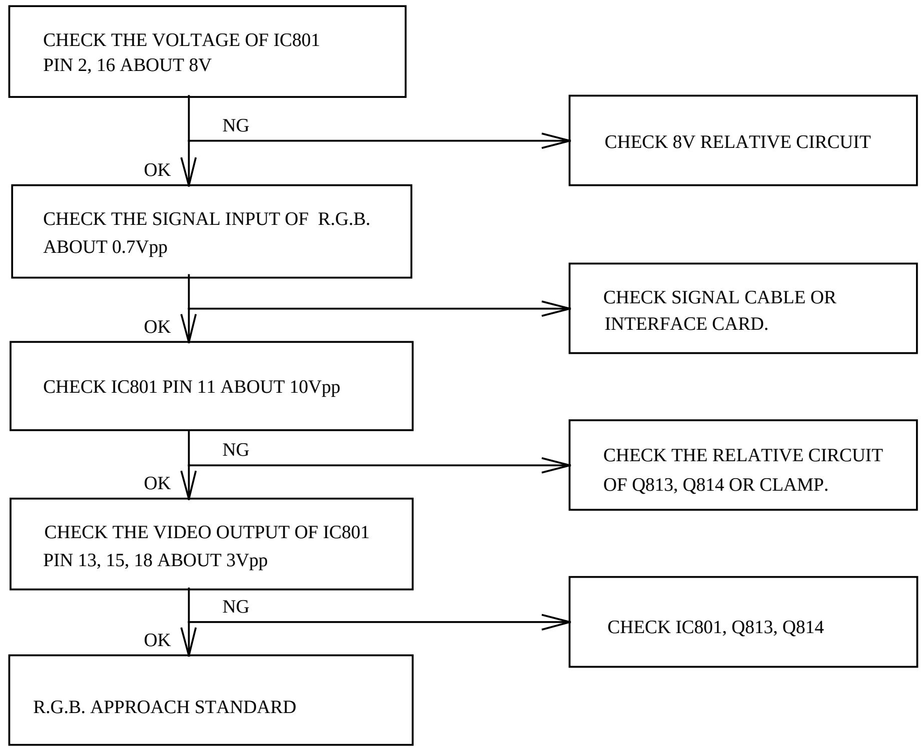
5-5 TRANSISTOR & DIODE CIRCUIT

LOCATION	CIRCUIT FUNCTION DESCRIPTION
D901 ~ D904	Bridge Rectifier for AC Source
D909	Half-Wave Rectifier for Start CKT
D910	Clamp Diode for Snubber CKT
D919	Rectifier for Output Voltage
D922	Rectifier for Output Voltage
D923	Rectifier for Output Voltage
D925	Rectifier for Output Voltage
D927	Forward Bias when Q403 Turn-off to Protect B+ Block CKT
D929	B+ Feed Back Rectifier from F.B.T Pulse
Q904	Start CKT Amplifier Transistor
Q907, Q908	Use for Off-Mode to Cut-off 6.3V Supply Voltage
Q909, Q910	Use for Standy-By or Suspend Mode to Cut-off 15V Supply Voltage
Q912, Q920	Push-Pull Topology to Drive Q911
Q401	Turn-on at Power ON/OFF and Change Mode to Protect Hor.Block
Q402	HOR. Driver Transistor
Q407, Q408	As a Switcher for H-Size Correction CKT
Q410, Q426	H-Size Corection Mosfet (Q426 15" only)
Q404, Q405	As Differential Amp. to Drive Q406
Q406	Darlington Transistor for H-Size Control
Q703	As a Switcher to Mute Screen when Abnormal Qccurring
Q704, Q705	Unit Brightness Control CKT
Q601, Q707	Develop Blanking Signal
Q813, Q814	A Amplifier to Corection and Support Clamp Signal

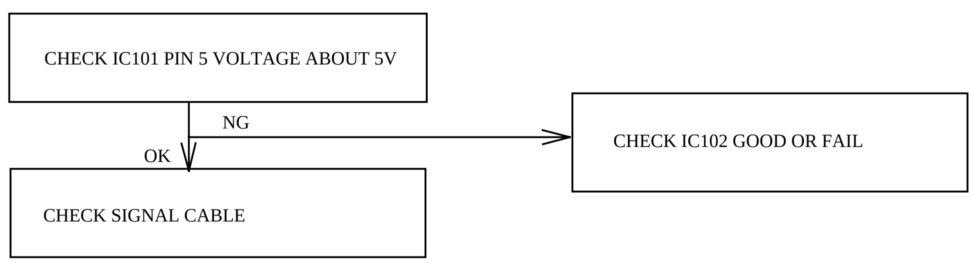
6.TROUBLE SHOOTING CHART
6-1 NO RASTER, CRT RELATIVE CIRCUIT PROBLEMS



2.ABNORMAL VIDEO LEVEL ON SCREEN

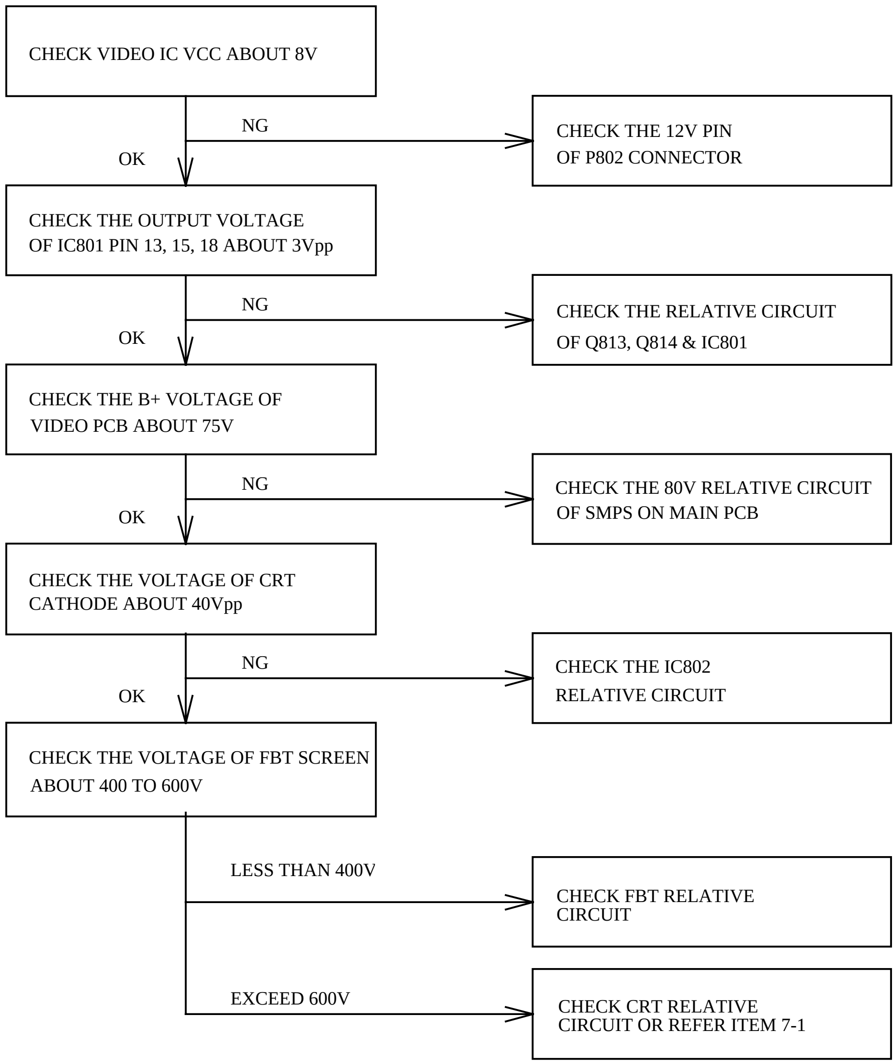


3. ABNORMAL DDC (PLUG & PLAY)

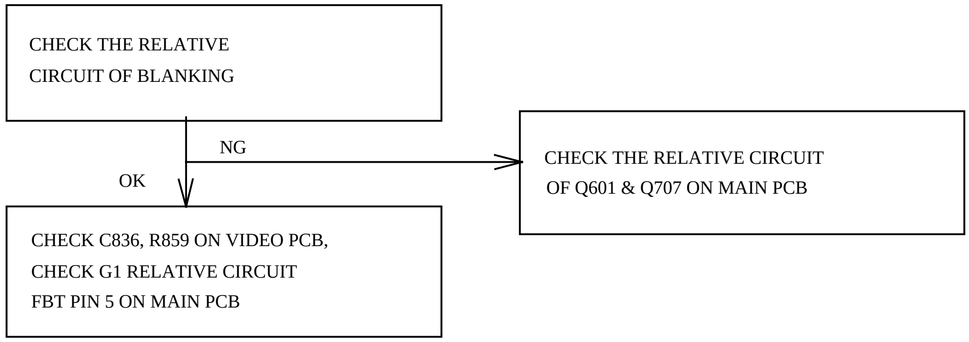


6-2 ABNORMAL DISPLAY

1.NO SIGNAL ON SCREEN

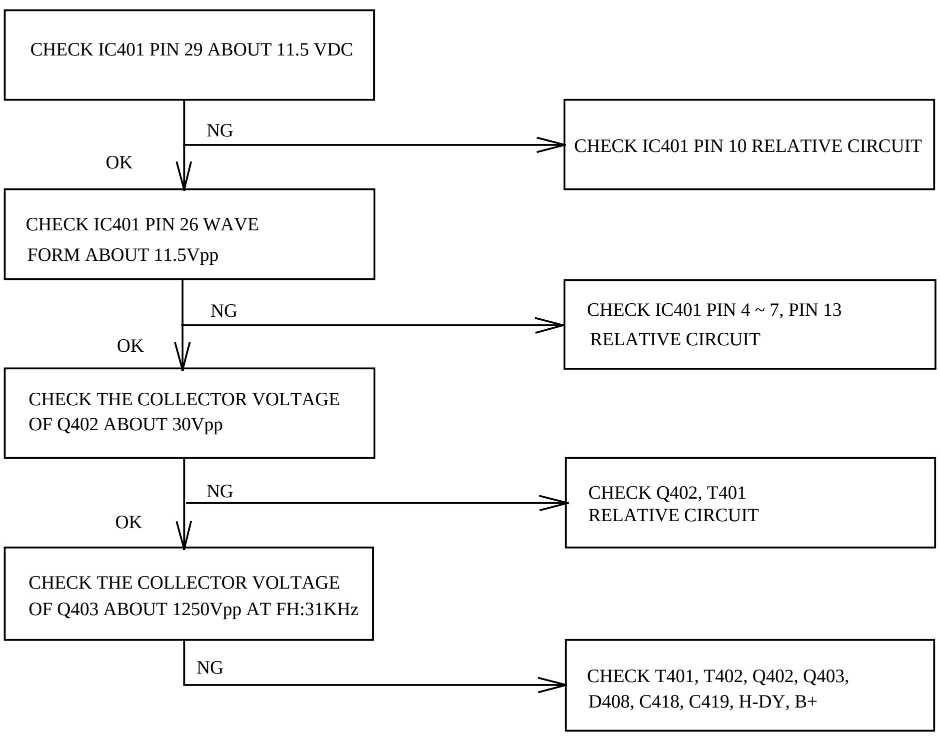


6-3 NO BLANKING



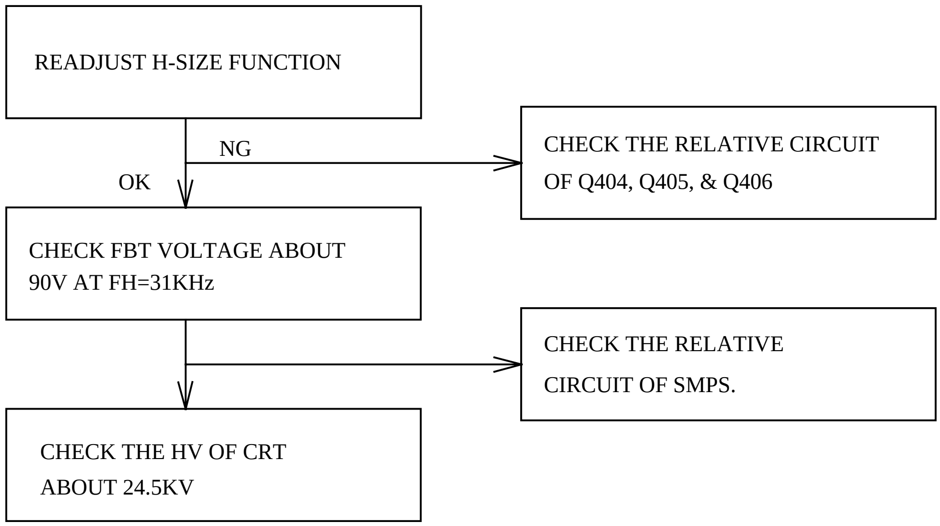
6-4 HOR./OSC/DEF/HV CIRCUIT FAULT

1. NO RASTER (DISCONNECT WITH SIGNAL CABLE)

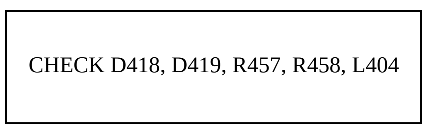


6-5 ABNORMAL HORIZONTAL DEFLECTION

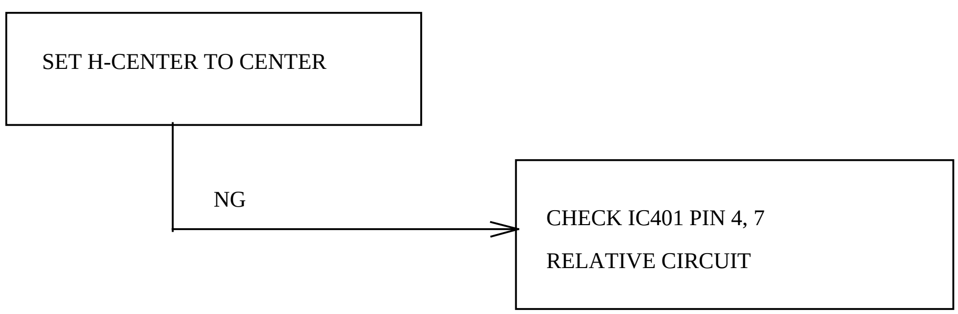
1. ABNORMAL HORIZONTAL SIZE



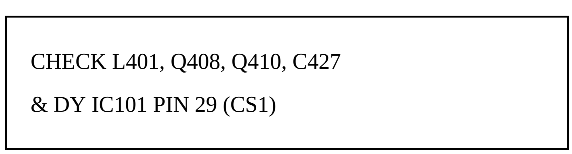
2. ABNORMAL HORIZONTAL RASTER CENTER



3. ABNORMAL HORIZONTAL VIDEO CENTER

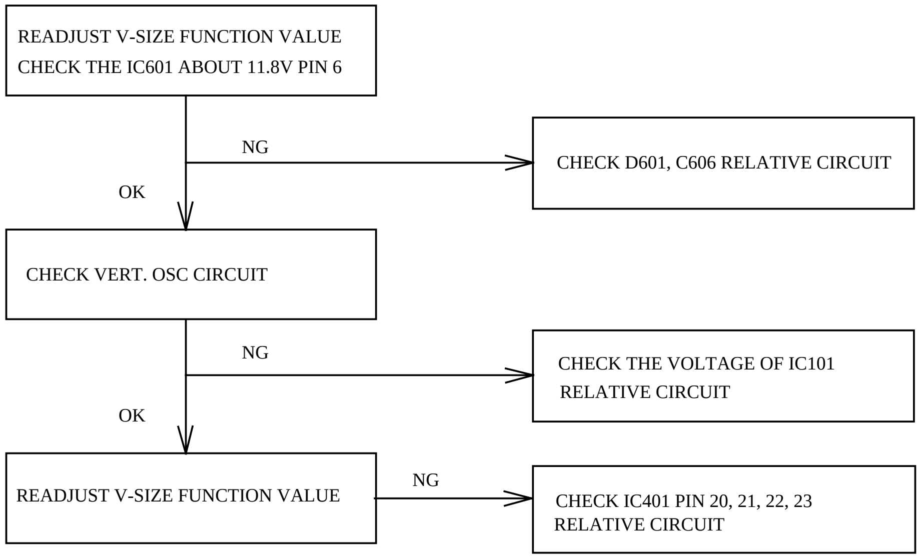


4. ABNORMAL HORIZONTAL LINEARITY

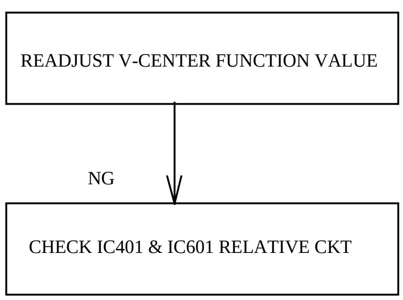


6-6 ABNORMAL VERTICAL SCANNING

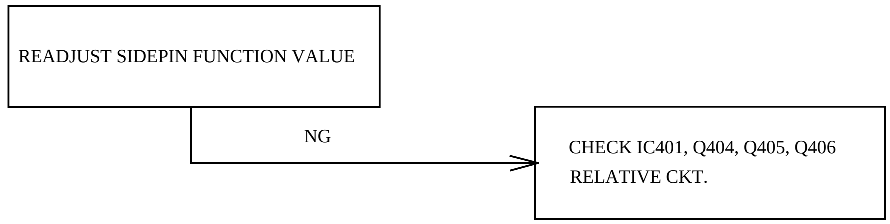
1. ABNORMAL VERTICAL SIZE



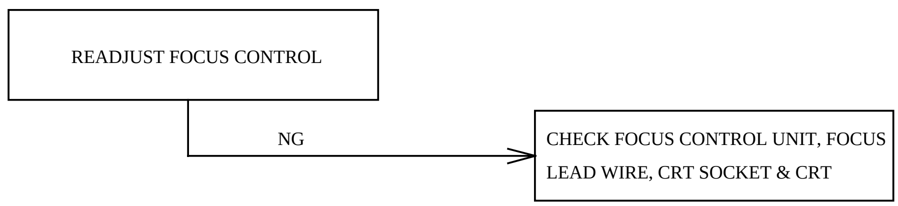
2. VERTICAL CENTER



6-7 SIDE-PIN CUSHION DISTORTION

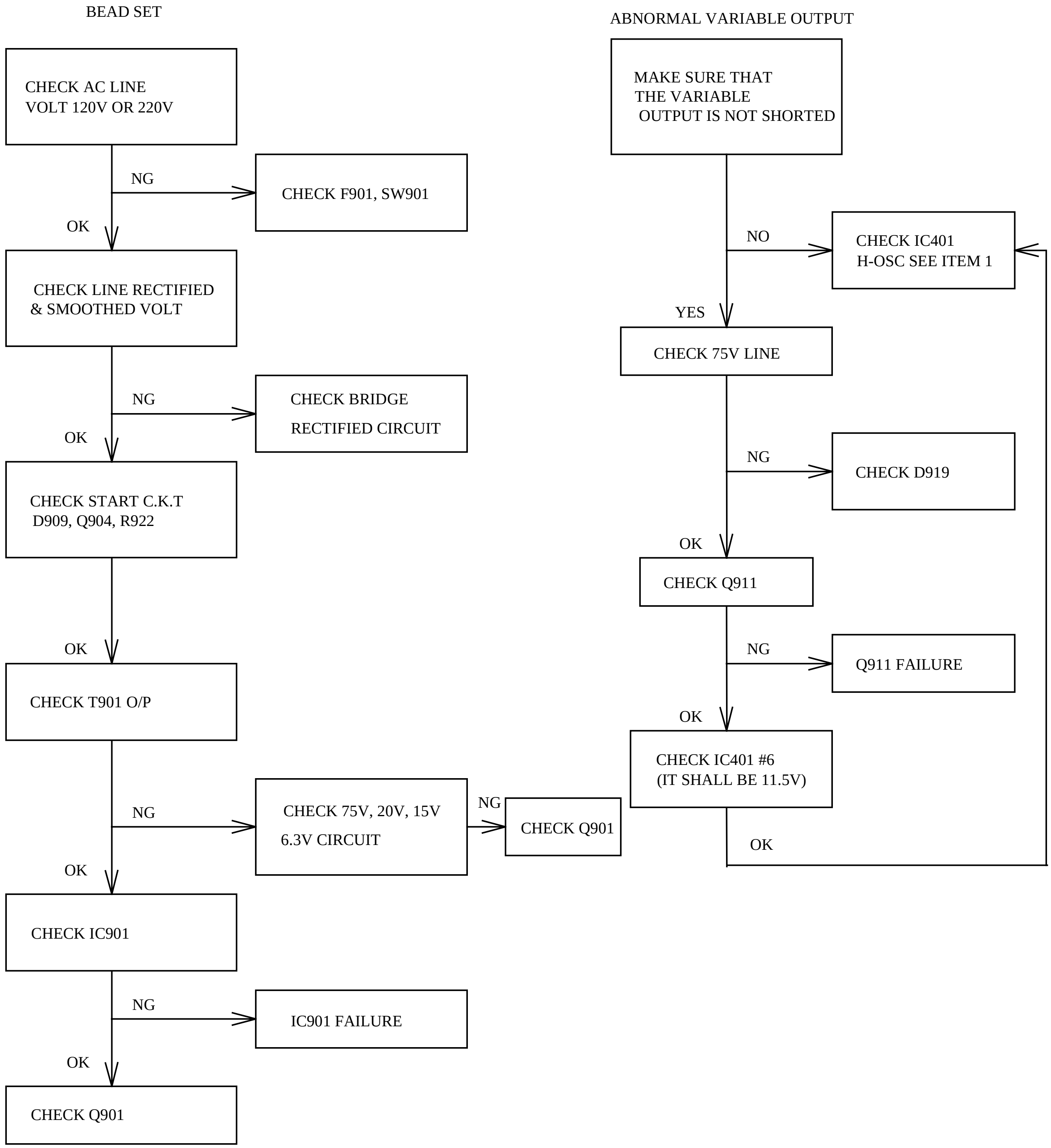


6-8 POOR FOCUS

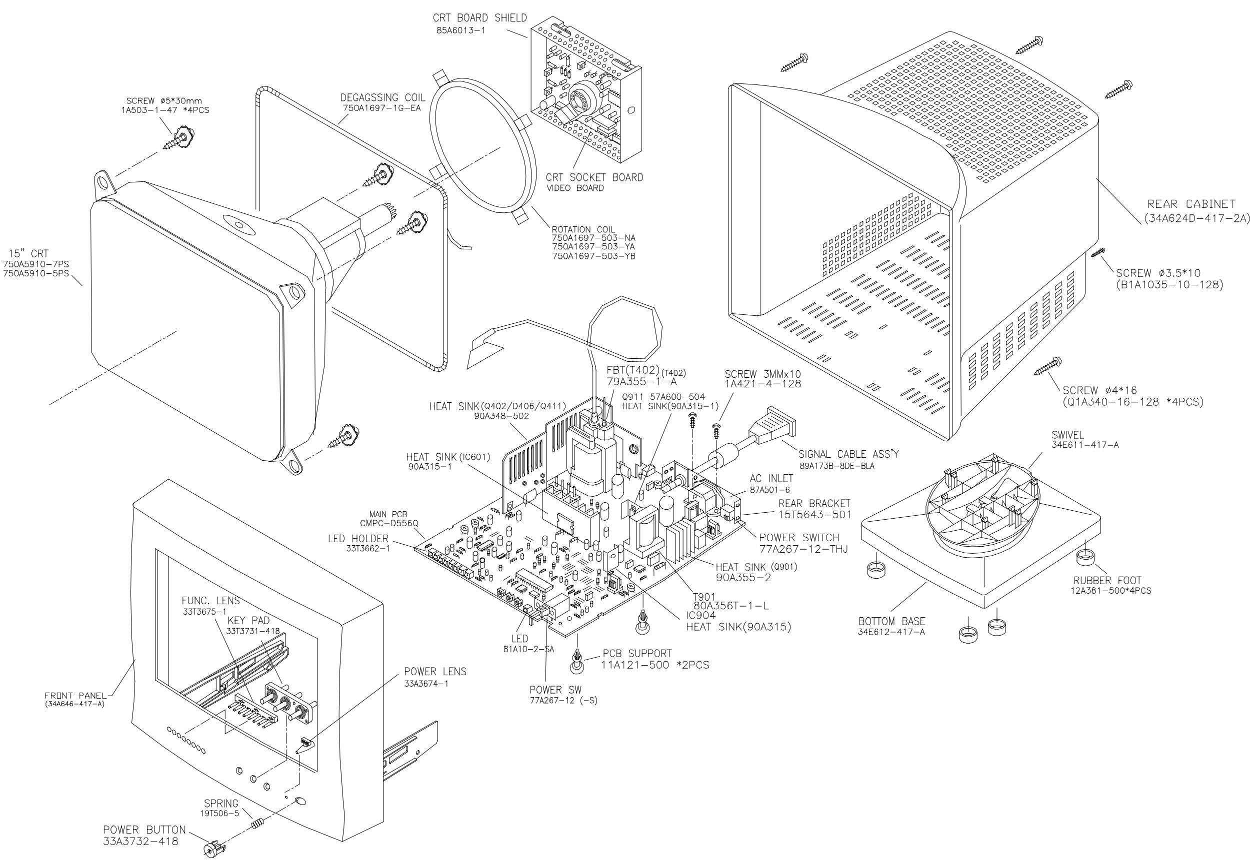


6-9 POWER SUPPLY TROUBLE SHOOTING CHART

BEFORE CHECK SW.REG. PLEASE REFER TO THE POWER SUPPLY BLOCK DIAGRAM
POWER SUPPLY OUTPUT: (A) VARIABLE OUTPUT : 88V - 160V
(D) EPENDING UPON H.SYNC FREQUENCY)
(B) CONSTANT OUTPUT : 6.3V, 15V, -12V, 75V



8. MECHANICAL OF CABINET FRONT DIS-ASSEMBLY



PARTS LIST OF CABINET

LOCATION	**D556QFCDDLD** (LOW RADIATION 220V)				**SPECIFICATION**
	CMC556Q				CHAS ASS'Y
	1A	503-	1 -	47	SCREW
	5A	38-	8		RUBBER WASHER
	7A	1	15	DE	PALLET
	9A	84-	23		TERMINAL LUG
	11A	6015	1		CRT SUPPORT
	19A	403-	5		BUMPER STEEL
	33A	3712-	1		A.B.S. PLASTIC
	33A	3675-	1		FUNC LED LENS
	33A	3731-	370		KEY PAD
	34A	646-	370 -	A	FRONT PANEL
	40A	153	64		CRT WARNING LABEL FOR MOP
	40A	154-	501 -	1	LABEL
⚠	40A	2008-	700	3A	ID LABEL
	40A	581-	700 -	1A	CARTON LABEL
	41A	68-	508 -	A	CARD
	44A	3121-	510		PU FOAM
	44A	6526-	1A		CUSHION
	44A	6526-	2A		CUSHION
	44A	6526-	700 -	1A	CARTON
	45A	77-	3		TRANSPARENT SHEET
	45A	77-	500		BARCODE RIBBON
	45A	77-	501		BARCODE RIBBON
	45A	88-	7 -	RN	PE BAG
	71A	303-	9 -	C	DISKETTES ECOLOGY
	85A	6013-	1		SHIELD
⚠	89A	494-	2 -	LN	POWER CORD UL/CSA
	95A	91-	205 -	24	WIRE
	95A	205R-	30 -	13A	WIRE
	95A	8013-	2		WIRE
	B1A	1035-	10 -	128	SCREW
	Q1A	340-	16 -	128	SCREW
	705A	556Q-	C41 -	DE	MANUAL ASS'Y FOR D556Q D
	705A	556Q-	F34 -	DL	CAB'T ASS'Y
	750A	1697-	1G -	EA	DEG. COIL UL/CSA
⚠	750A	1697-	503 -	NA	ROTATION COIL
	750A	1697-	503 -	YB	ROTATION COIL
	750A	1697-	503 -	YA	ROTATION COIL
	750A	5910-	7PS		15” CHUNGHWA CRT

PARTS LIST OF CHAS

LOCATION	CMC556Q				SPECIFICATION
	CMP556QAI				MAIN PC BOARD ASS'Y
	CRPC556Q				CRT BOARD ASS'Y
	1A	421-	4 -	128	SCREW
	11A	121-	500		PC SUPPORT
	15A	5640-	1 -	A	AL GND LUG
	15A	5643-	501		REAR BRACKRT
	33A	3662-	1		LED HOLDER
	40A	581-	26 -	702	FAIL-SAFE LABEL
	50A	500-	1		CABEL TIE
	71A	100	7	T	FERRITE BEAD
	71A	100-	7 -	H	FERRITE CORE
	84A	33-	10		FUSE
	89A	173B-	80E -	BLA	SIGNAL CABLE
	89A	173B-	80E -	GLA	SIGNAL CABLE
	96A	25-	10		PLASTIC TUBE
	96A	29-	6	190	H.S. TUBING DIA.4.OMM
	B1A	1040-	8 -	128	SCREW
	M1A	1140-	8 -	128	SCREW
	M1A	1140-	6 -	128	SCREW
	Q1A	1135-	10 -	128	SCREW
	705A	556Q-	C57 -	03	Q901 ASS'Y
	705A	556Q-	C57 -	01	Q911 ASS'Y
	705A	556Q-	C56 -	01	IC601 ASS'Y
	705A	556Q-	C56 -	1DL	IC101 CPU ASS'Y
	705A	556Q-	C57 -	04	Q403 ASS'Y
	705A	556Q-	C87 -	01	AC INLET INALWAYS CN901
	705A	556Q-	C56 -	02	IC904 ASS'Y
	750A	5910-	556	D4Q	15” CPT CRT D556Q DELL
	750A	5910-	556	D5Q	15” CPT CRT D556Q DELL
	750A	5932-	556	DLQ	15” PHILIPS D556Q DELL
(GND2)	95A	205-	30 -	08H	PVC WIRE
(LED1)	81A	10-	2 -	SA	POWER LED
(SW101)	77A	602-	1 -	CJ	TACT SWITCH TSVB-2
(SW102)	77A	602-	1 -	CJ	TACT SWITCH TSVB-2
(SW103)	77A	602-	1 -	CJ	TACT SWITCH TSVB-2
AS1	95A	207T-	30 -	05A	WIRE
B-B	95A	201-	69 -	021	WIRE
C-C	95A	202-	59 -	052	WIRE
C406	65A	450-	104 -	7T	0.1UF +80-20% 50V Y5V
⚠ C427	63A	210J-	394 -	3CC	0.39uF +-5% 400V
C427	63A	210J-	394 -	3CM	0.39uF +-5% 400V P=15mm
C428	63A	210J-	104 -	2BC	0.1uF +-5% 250V
C431	63A	210J-	104 -	2BC	0.1uF +-5% 250V
C432	67A	215-	470 -	11	47uF +-20% 200V
C432	67A	215-	470 -	11H	47uF 200V
C432	67A	215-	470 -	11J	47uF 200V JAMICON
C432	67A	215-	470 -	11L	47uF 200V
C436	67A	305-	101 -	7T	100uF 20% 50V
C440	65A	2K-	470 -	6B	47PF 2KV +-10%
C449	64A	44J-	473 -	0AT	0.047/50V
C449	64A	44J-	473 -	1AT	0.047UF +-20% 16V

C603	67A	309-	471 -	3	470UF +-20% 16V
C606	67A	309-	102 -	3	0.1uF +80-20% 50V Y5V
C609	67A	450-	104 -	7T	1000uF +-20% 16V
C713	67A	309-	220 -	11	22uF +-20% 200V
C714	67A	305-	331 -	3	330uF +-20% 16V
C900	65A	305M-	472 -	2B	4700PF +-20% 400VAC/250VAC
C900	65A	305M-	472 -	2B2	4700PF +-20% 400VAC PY17
C901	63A	107-	224 -	5S	X CAP 0.22U/ 250V
C901	63A	107-	224 -	10S	R.46 SERIES(MPP)
C902	63A	107-	334 -	5	0.33uF +-20% 250V
C902	63A	107-	334 -	10	0.33uF +-20% 275V
C907	67A	30-	151 -	14D	150uF +-20% 400V
C907	67A	30-	151 -	14J	150uF 400V
C907	67A	30-	151 -	14L	150uF 400V
C915	65A	2M-	103 -	3B	0.01uF +-20% 2KV Z5U
C931	67A	305-	101 -	11J	330PF +-10% 1KV
C936	67A	305-	102 -	4	1000uF +-20% 25V
C937	67A	305-	471 -	3T	470uF +-20% 16V
C938	67A	305-	471 -	3T	470uF +-20% 16V
C939	67A	305-	102 -	3	1000uF +-20% 16V
C942	67A	305-	102 -	4	1000uF +-20% 25V

LOCATION	**CMC556Q**				**SPECIFICATION**
C951	67A	215-	470 -	11H	47uF +-20% 200V
C951	67A	215-	470 -	11J	47uF +-20% 200V JAMICON
C951	67A	215-	470 -	11L	47uF +-20% 200V
C963	65A	305M-	472 -	2B2	4700PF +-20% 400VAC
C964	65A	305M-	472 -	2B2	4700PF +-20% 400VAC
CN902	33A	3074-	1		2P PLUG
CN903	33A	3278-	2		2P PLUG B2B-XHA/JST
D901	93A	52-	55P -	52T	DIODE IN5408 PEC
D901	93A	52-	55W -	52T	RECTIFIER DIODE IN5408 PEC
D902	93A	52-	55P -	52T	DIODE IN5408 PEC
D902	93A	52-	55W -	52T	RECTIFIER DIODE IN5408 PEC
D903	93A	52-	55P -	52T	DIODE IN5408 PEC
D902	93A	52-	55W -	52T	RECTIFIER DIODE IN5408 PEC
D904	93A	52-	55P -	52T	DIODE IN5408 PEC
D904	93A	52-	55W -	52T	RECTIFIER DIODE IN5408 PEC
D919	93A	60	-73A		F R D 3A/400V 31DF4/I.R
D919	93A	3040-	10		31DF4-FC/I.R
D919	93A	3040-	10		SM-3AP4
D922	93A	3020-	6 -	52T	DIODE STPR320
D923	93A	3020-	8		DIODE RG-4Z
D925	93A	3020-	501	52T	SUF54023
DF922	71A	55-	2 -	A	FERRITE BEAD
F901	84A	7-	45 -	A	FUSE 2.5A 250V –SB/BEL
F901	84A	7-	510 -	A	FUSE
FB401	71A	55-	9 -	T	SHIELD BEAD
H802	95A	8013-	9 -	7	HARNESS
H803	95A	8013-	6 -	507	WIRE HARNESS
HS1	95A	205B-	30 -	04A	WIRE
IC102	56A	1133-	8		AT24C04 10PC IC EEPROM
IC102	56A	1133-	8		MT24C04
IC104	56A	74LS-	14 -	H	HD 74LS14P
IC104	56A	74LS-	14 -	M	SN 74LS14N
IC104	56A	74LS-	14 -	TI	SN 74LS14N HEX SCHMITT
IC401	56A	573	1		TDA9111
IC901	56A	379-	12		UC3842AM
L401	73A	147-	48C -	L	LINEARITY COCL
L401	73A	147-	48C -	S	LINEARITY COCL
L404	73A	253-	70		1.5MH +-5% 0.4A

L404	73A	253-	70	H	1.5MH +-5% 0.4A
L404	73A	253-	70	S	1.5MH +-5% 0.4A
L405	73A	253-	68 -	H	180UH +-10%
L405	73A	253-	68 -	L	180UH +-10%
L405	73A	253-	68 -	S	CHOKE COIL
L901	73A	174-	2 -	GA	25MH FILTER
L901	73A	174-	2 -	HA	LINE FILTER
L901	73A	174-	2 -	LA	25MH LINE FILTER
L901	73A	174-	2 -	SA	25MH FILTER
L901	73A	174-	2 -	TEA	LINE FILTER
L903	73A	259-	4		200UH +-5%
L903	73A	259-	4	S	CHOKE COIL
L903	73A	259-	4	T	CHOKE COIL
L906	73A	253-	90 -	G	CHOKE COIL
L906	73A	253-	90 -	H	CHOKE
L906	73A	253-	90 -	L	CHOKE COIL
L906	73A	253-	90 -	S	CHOKE
L906	73A	253-	90 -	TE	CHOKE COIL
LED2	81A	2-	3 -	2B	LED GREEN BL-B2441J
LED3	81A	2-	3 -	2B	LED GREEN BL-B2441J
LED4	81A	2-	3 -	2B	LED GREEN BL-B2441J
LED5	81A	2-	3 -	2B	LED GREEN BL-B2441J
LED6	81A	2-	3 -	2B	LED GREEN BL-B2441J
LED7	81A	2-	3 -	2B	LED GREEN BL-B2441J
LED8	81A	2-	3 -	2B	LED GREEN BL-B2441J
LED9	81A	2-	3 -	2B	LED GREEN BL-B2441J
NR901	61A	58-	8		NTCR 15 OHM GC P CD 150
NR901	61A	58-	505		NTCR 16 OHM +-15%
P402	33A	3192-	4		4 P PLUG
P403	33A	8009-	3		3 P PLUG
PR901	61A	52-	27 -	4W	9 OHM PTCR
Q402	57A	706-	2 -	T	2N7000/PHILIPS
Q402	57A	706-	8 -	T	2N7000/GENERAL SEMICONDU
Q410	57A	600-	14		CEPF630 BY CET
Q410	57A	600-	503		IRF630A
Q426	57A	600-	14		CEPF630 BY CET
Q426	57A	600-	503		IRF630A
Q426	57A	600-	14		MOS FET H630F
Q705	57A	498-	1	T	TRAN BF423 TAPING PHILIP
Q705	57A	690-	1		POWER AMP. 2SB649A/HITACH
Q907	57A	2015-	1		KSB772Y/FAIRCHILD
Q909	57A	728-	3		HSB772P/HSB772E
R127	61A	152M-	910 -	64	91 OHM +-5% 2W
R426	61A	153M-	330 -	59	33 OHM +-5% 3W
R428	61A	153M-	688 -	59	0.68 OHM +-5% 3W
R457	61A	153M-	330 -	59	33 OHM +-5% 3W
R457	61A	153M-	560 -	59	56 OHM +-5% 3W
R458	61A	153M-	560 -	59	56 OHM +-5% 3W
R608	61A	152M-	100 -	64	10 OHM +-5% 2W
R722	61A	175L-	332 -	52T	3.3KOHM +-5% 1/2W
R723	61A	152M-	101 -	64	100 OHM +-5% 2W
R927	61A	153M-	333 -	59	33K OHM +-5% 3W
R929	61A	20K-	338 -	GB1	0.33 OHM +-10% 2W
R955	61A	303-	228 -	64	0.22 OHM +-5% 1W
R989	61A	152M-	471 -	59	470 OHM +-5% 2W
RF955	71A	55-	2		FERRITE BEAD
RY901	77A	260-	5 -	2W	RELAY OSA –SS-212DM5
SS1	95A	207T-	30 -	05A	WIRE

LOCATION **CMC556Q** **SPECIFICATION**

SW901	77A	267-	12 -		PWR SW 5A/250V
SW901	77A	267-	12 -	S	POWER SWITCH
SW901	77A	267-	12 -	HJ	PUSH-PUSH SEITCH(TV-5)
SW901	77A	267-	12 -	THJ	POWER SWITCH
T401	79A	167-	71B -	L	DRIVER X'FMR
T402	79A	355	1 -		FBT
T402	79A	355	4 -	A	14" FBT
T901	80A	356T	1 -	G	E80
T901	80A	356T	1 -	L	X'FMR D356PT BY LI TAI
TP901	9A	211-	2		PIN 1.2X15MM
TP902	9A	211-	2		PIN 1.2X15MM
VR701	75A	335-	473		47K OHM +-30%
VR702	75A	335M-	204 -	H	200K OHM METAL VR
VR901	75A	335-	101		100 OHM +-30%
VR902	75A	335-	223		22K OHM +-30%
X101	93A	22-	22		8.0000 MHZ
X101	93A	22-	22 -	H	CRYSTAL HC-49/U8.000 MHZ

PARTS LIST OF MAIN PC BOARD

LOCATION	CMP556QAI				SPECIFICATION
	6A	31-	4		BRASS
	715A	684-	2		MAIN BOARD
C103	65A	450-	104 -	7T	0.1uF +80-20% Y5V 50V
C104	67A	309-	101 -	4T	100uF +-20% 25V
C105	65A	450-	104 -	7T	0.1uF +80-20% Y5V 50V
C106	67A	309-	330 -	7T	33uF +-20% 50V
C109	67A	60-	229 -	7T	2.2uF +-20% 50V
C110	67A	309-	109 -	7T	1.0uF +-20% 50V
C130	65A	442-	101 -	13T	100PF +-5% 50V NPO
C160	65A	444-	101 -	5T	100 PF 10% 50V Y5P
C162	65A	444-	102 -	13T	1000 PF 10% 50V Z5P
C163	65A	444-	101 -	5T	100 PF 10% 50V Y5P
C164	65A	450-	104 -	7T	0.1uF +80-20% Y5V 50V
C403	64A	44J-	223 -	1AT	22NF 100V
C403	64A	44J-	223 -	0AT	22NF 63V
C405	67A	309-	470 -	3T	47uF +-20% 16V
C407	65A	444-	101 -	5T	100 PF 10% 50V Z5P
C408	65A	444-	101 -	5T	100 PF 10% 50V Z5P
C410	65A	450-	104 -	7T	0.1uF +80-20% Y5V 50V
C411	67A	309-	470 -	3T	47uF +-20% 16V
C412	65A	442-	221 -	13T	220PF +-5% 50V NPO
C413	65A	450-	104 -	7T	0.1uF +80-20% Y5V 50V
C415	64A	176J-	102 -	1T	0.001UF +-5% 100V
C417	64A	176J-	154 -	0T	0.15uF +-5% 63V/50V
C421	65A	1K-	102 -	1T	1NF/1KV Z5F+-10%
C423	65A	444-	332 -	5T	3300 PF 10% 50V Y5P
C429	65A	444-	332 -	5T	3300 PF 10% 50V Y5P
C433	67A	309-	100 -	7T	10uF +-20% 50V
C434	67A	309-	220 -	7T	22uF +-20% 50V
C435	64A	44J-	103 -	0AT	0.01uF 63V
C435	64A	44J-	103 -	1AT	0.01UF 100V
C437	67A	309-	220 -	7T	22uF +-20% 50V
C438	67A	309-	109 -	7T	1.0uF +-20% 50V
C439	67A	309-	109 -	7T	1.0uF +-20% 50V
C441	64A	176J-	224 -	1T	0.22UF +-5% 100V
C442	64A	176J-	272 -	1T	2700PF +-5% 100V
C443	67A	309-	470 -	3T	47uF +-20% 16V
C444	65A	450-	104 -	7T	0.1uF +80-20% Y5V 50V

C445	95A	90-	23		TIN COATED
C446	65A	444-	101 -	5T	100 PF 10% 50V Z5P
C447	64A	45G-	102 -	1AT	0.001UF 100V +-2%
C448	64A	176J-	823 -	0T	0.082UF +-5% 50/63V
C448	64A	176J-	823 -	1T	0.082uF +-5% 100V
C460	65A	450-	333 -	7T	0.033uF +-5% 50V
C463	64A	44J-	103 -	0AT	0.01uF 63v
C463	64A	44J-	103 -	1AT	0.01UF 100V
C476	65A	450-	104 -	7T	0.1uF +80-20% Y5V 50V
C480	95A	90-	23		TIN COATED
C601	64A	44J-	104 -	0AT	0.1uF 50V PEI
C601	64A	44J-	104 -	1AT	0.1UF +-5% 100V
C601	64A	176J	104 -	1T	0.1UF 5% 100V
C602	65A	444-	331 -	5T	330 PF 10% 50V Y5P
C604	64A	176J-	224 -	0T	0.22uF +-5% 63V
C605	67A	309-	470 -	7T	47uF +-20% 50V

LOCATION	**CMP556QAI**				**SPECIFICATION**
C607	65A	444-	681 -	5T	680 PF 10% 50V Z5P
C608	65A	450-	104 -	7T	0.1uF +80-20% Y5V 50V
C610	64A	176J-	474 -	0T	0.47uF +-5% 50/63V
C610	64A	176J-	474 -	1T	0.47uF +-5% 100V
C611	65A	450-	104 -	7T	0.1uF +80-20% Y5V 50V
C612	67A	309-	470 -	3T	47uF +-20% 16V
C613	64A	176J-	154 -	1T	0.15UF+-5% 100V
C614	64A	44J-	103 -	1AT	0.01UF 100V
C615	64A	44J-	103 -	0AT	0.01UF 63V
C615	64A	44J-	103 -	1AT	0.01UF +-5% 100V
C705	67A	309-	220 -	7T	22uF +-20% 50V
C707	64A	176J-	223 -	2T	0.022uF +-5% 250V
C709	65A	1K-	561 -	5T	56CPT 10% Y5P 1KV
C710	64A	176J-	224 -	1T	0.22uF +-5% 100V
C712	67A	60-	229 -	7T	2.2uF 50V
C908	65A	450-	104 -	7T	0.1UF +80-20% 50V Y5V
C914	67A	305-	479 -	7T	4.7uF +-20% 50V
C916	67A	305-	101 -	4T	100uF +-20% 25V
C917	67A	305-	229 -	7T	2.2uF +-20% 50V
C918	64A	44J-	332 -	1AT	3300PF +-5% 100V
C920	64A	44J-	102 -	1AT	1000PF +-5% 100V
C921	64A	44J-	104 -	0AT	0.1uF 50V PEI
C921	64A	44J-	104 -	1AT	0.1uF +-5% 100V PEI
C921	64A	176J-	104 -	1T	0.1uF +-5% 100V
C922	64A	176J-	104 -	1T	0.1uF +-5% 100V
C923	65A	1K-	331 -	5T	330PF/1KV Y5P+-10%
C924	64A	44J-	332 -	1AT	3300PF +-5% 100V
C925	67A	309-	100 -	7T	10uF +-20% 50V
C941	64A	176J-	104 -	0T	0.1uF +-5% 63V
C943	64A	44J-	222 -	1AT	2200PF +-5% 100V
C944	65A	450-	104 -	7T	0.1uF +80-20% Y5V 50V
C945	64A	176J-	104 -	0T	0.1uF +-5% 63V
C946	64A	176J-	104 -	2T	0.1uF +-5% 250V MPE
C947	67A	309-	479 -	7T	4.7uF +-20% 50V
C950	65A	1K-	221 -	5T	220PF/1KV Y5P+-10%
C955	65A	1K-	221 -	5T	220PF/1KV Y5P+-10%
C961	64A	44J-	103 -	0AT	0.01UF 63V
C961	64A	44J-	103 -	1AT	0.01UF 100V
C965	64A	44J-	103 -	1AT	0.01uF +-5% 100V
C966	67A	309-	470 -	7T	47UF+-20%50V
C995	64A	44J-	472 -	1AT	4700PF +-5% 100V
D101	93A	64-	11 -	52T	DIODE IN4148
D102	93A	64-	11 -	52T	DIODE IN4148

	D103	93A	64-	11 -	52T	DIODE IN4148
	D104	93A	64-	11 -	52T	DIODE IN4148
	D105	93A	64-	11 -	52T	DIODE IN4148
	D125	93A	64-	11 -	52T	DIODE IN4148
	D126	93A	64-	11 -	52T	DIODE IN4148
	D127	95A	90-	23		TIN COATED
	D160	93A	64-	11 -	52T	DIODE IN4148
	D402	93A	64-	11 -	52T	DIODE IN4148
	D403	93A	1002-	1 -	52T	1N5817
	D403	93A	1002-	1T -	52T	1N5817
	D403	93A	1002-	11 -	52T	DIODE 1N4148
	D404	93A	64-	11 -	52T	DIODE IN4148
!	D405	93A	1002-	1 -	52T	IN5817 1A/20V
	D405	93A	1002-	1P -	52T	IN5817
	D405	93A	1002-	1 -	52T	IN5817 1A/20V
	D406	93A	60-	21P -	52T	PS156R
	D406	93A	60-	21T -	52T	FR 156R
	D407	93A	60-	21P -	52T	PS156R
	D407	93A	60-	21T -	52T	FR156R
	D411	93A	64-	19 -	52T	DIODE 1SS83/HIACHI
	D411	93A	64-	19G -	52T	BAV21/G.I
	D412	93A	64-	11H -	52T	DIODE IN4148
	D414	93A	60-	38P -	52T	FR103
	D414	93A	60-	38T -	52T	FR107/RECTRON
	D415	93A	60-	26 -	52T	FR107
	D415	93A	60-	26T -	52T	RECTIFIER DUIDE FR107
	D417	95A	90-	23		TIN COATED
	D418	93A	60-	21P -	52T	PS156R
	D418	93A	60-	21T -	52T	PS156R
	D419	93A	60-	21P -	52T	PS156R
	D419	93A	60-	21T -	52T	FR155
	D420	93A	64-	11 -	52T	DIODE IN4148
	D450	93A	64-	11 -	52T	DIODE IN4148
	D460	93A	64-	11 -	52T	DIODE IN4148
	D463	93A	60-	26 -	52T	FR107
	D463	93A	60-	26T -	52T	FR107
	D601	93A	52-	47P -	52T	1N4004
	D602	93A	64-	11 -	52T	DIODE IN4148
	D603	93A	64-	11 -	52T	DIODE IN4148
	D701	93A	64-	11 -	52T	DIODE IN4148
	D702	93A	64-	11 -	52T	DIODE IN4148
	D703	93A	64-	11 -	52T	DIODE 1N4148
	D704	93A	52-	47P -	52T	IN4004
	D704	93A	52-	47T -	52T	IN4004
	D706	93A	60-	21P -	52T	PS156R
	D706	93A	60-	21T -	52T	FR155
	D710	95A	90-	23		TIN COATED
	D721	95A	90-	23		TIN COATED
	D909	93A	52-	1P -	52T	IN4005
	D909	93A	52-	1T -	52T	1A 600V IN4005

LOCATION	**CMP556QAI**				**SPECIFICATION**
D910	93A	60-	21P -	52T	PS156R
D910	93A	60-	21T -	52T	FR155
D911	93A	64-	31 -	52T	S.W DIODE BAV20
D911	93A	64-	31G -	52T	BAV20
D911	93A	64-	31T -	52T	BAV20
D912	93A	64-	31 -	52T	S.W DIODE BAV20
D912	93A	64-	31T -	52T	BAV20
D913	93A	64-	11 -	52T	DIODE IN4148
D914	93A	64-	11 -	52T	DIODE IN4148

	D926	93A	64-	11 -	52T	DIODE IN4148
	D927	93A	64-	11 -	52T	DIODE IN4148
	D928	93A	64-	11 -	52T	DIODE IN4148
	D929	93A	52-	47P -	52T	1N4004
	D929	93A	52-	47T -	52T	1N4004
	D930	93A	1040-	2 -	52T	UF4004
	D930	93A	1040-	501 -	52T	GUF10G
	D939	93A	64-	11 -	52T	DIODE IN4148
	D984	93A	64-	11 -	52T	DIODE IN4148
	D995	93A	64-	11 -	52T	DIODE IN4148
⚠	FB402	71A	55-	7 -	A	BEAD COIL 271641-00
	FB402	71A	55-	7 -	S	LB 3.5x0.8x9
	FB402	71A	55-	7 -	T	FERRITE BEAD
	FB403	71A	55-	7 -	A	BEAD COIL 271641-00
	FB403	71A	55-	7 -	S	LB 3.5x0.8x9
	FB403	71A	55-	7 -	T	FERRITE BEAD
	FB901	95A	90-	23		TIN COATED
	FB902	95A	90-	23		TIN COATED
	FB903	95A	90-	23		TIN COATED
	FB904	71A	55-	9 -	T	SHIELD BEAD
	FB905	95A	90-	23		TIN COATED
	FB907	71A	55-	9 -	T	SHIELD BEAD
	J001	95A	90-	23		TIN COATED
	J003	95A	90-	23		TIN COATED
	J004	95A	90-	23		TIN COATED
	J005	95A	90-	23		TIN COATED
	J006	95A	90-	23		TIN COATED
	J007	95A	90-	23		TIN COATED
	J008	95A	90-	23		TIN COATED
	J009	95A	90-	23		TIN COATED
	J013	95A	90-	23		TIN COATED
	J014	95A	90-	23		TIN COATED
	J015	95A	90-	23		TIN COATED
	J016	95A	90-	23		TIN COATED
	J017	95A	90-	23		TIN COATED
	J019	95A	90-	23		TIN COATED
	J020	95A	90-	23		TIN COATED
	J021	95A	90-	23		TIN COATED
	J022	95A	90-	23		TIN COATED
	J023	95A	90-	23		TIN COATED
	J024	95A	90-	23		TIN COATED
	J025	95A	90-	23		TIN COATED
	J026	95A	90-	23		TIN COATED
	J027	95A	90-	23		TIN COATED
	J028	95A	90-	23		TIN COATED
	J029	95A	90-	23		TIN COATED
	J030	95A	90-	23		TIN COATED
	J032	95A	90-	23		TIN COATED
	J033	95A	90-	23		TIN COATED
	J034	95A	90-	23		TIN COATED
	J036	95A	90-	23		TIN COATED
	J037	95A	90-	23		TIN COATED
	J038	95A	90-	23		TIN COATED
	J039	95A	90-	23		TIN COATED
	J040	95A	90-	23		TIN COATED
	J041	95A	90-	23		TIN COATED
	J042	95A	90-	23		TIN COATED
	J043	95A	90-	23		TIN COATED
	J045	95A	90-	23		TIN COATED
	J046	95A	90-	23		TIN COATED
	J047	95A	90-	23		TIN COATED
	J049	95A	90-	23		TIN COATED
	J050	95A	90-	23		TIN COATED

J051	95A	90-	23		TIN COATED
J052	95A	90-	23		TIN COATED
J053	95A	90-	23		TIN COATED
J054	95A	90-	23		TIN COATED
J058	95A	90-	23		TIN COATED

LOCATION	**CMP556QAI**				**SPECIFICATION**
J059	95A	90-	23		TIN COATED
J061	95A	90-	23		TIN COATED
J063	95A	90-	23		TIN COATED
J064	95A	90-	23		TIN COATED
J065	95A	90-	23		TIN COATED
J066	95A	90-	23		TIN COATED
J067	95A	90-	23		TIN COATED
J068	95A	90-	23		TIN COATED
J069	95A	90-	23		TIN COATED
J070	95A	90-	23		TIN COATED
J071	95A	90-	23		TIN COATED
J072	95A	90-	23		TIN COATED
J073	95A	90-	23		TIN COATED
J074	95A	90-	23		TIN COATED
J075	95A	90-	23		TIN COATED
J077	95A	90-	23		TIN COATED
J078	95A	90-	23		TIN COATED
J079	95A	90-	23		TIN COATED
J080	95A	90-	23		TIN COATED
J081	95A	90-	23		TIN COATED
J082	95A	90-	23		TIN COATED
J083	95A	90-	23		TIN COATED
J084	95A	90-	23		TIN COATED
J085	95A	90-	23		TIN COATED
J086	95A	90-	23		TIN COATED
J087	95A	90-	23		TIN COATED
J089	95A	90-	23		TIN COATED
J090	95A	90-	23		TIN COATED
J091	95A	90-	23		TIN COATED
J092	95A	90-	23		TIN COATED
J094	95A	90-	23		TIN COATED
J095	95A	90-	23		TIN COATED
J096	61A	175L-	159 -	52T	1.5 OHM +-5% 1/2W
J097	95A	90-	23		TIN COATED
J098	95A	90-	23		TIN COATED
J099	95A	90-	23		TIN COATED
J100	95A	90-	23		TIN COATED
J101	95A	90-	23		TIN COATED
J103	61A	175L-	332 -	52T	3.3 OHM +-5% 1/2W
J104	95A	90-	23		TIN COATED
J107	95A	90-	23		TIN COATED
J110	95A	90-	23		TIN COATED
J111	95A	90-	23		TIN COATED
J113	95A	90-	23		TIN COATED
J116	95A	90-	23		TIN COATED
J117	95A	90-	23		TIN COATED
J118	95A	90-	23		TIN COATED
J120	95A	90-	23		TIN COATED
J121	95A	90-	23		TIN COATED
J129	95A	90-	23		TIN COATED
J130	95A	90-	23		TIN COATED
J131	95A	90-	23		TIN COATED
J132	95A	90-	23		TIN COATED
J133	95A	90-	23		TIN COATED

J134	95A	90-	23		TIN COATED
L101	73A	53-	339 -	10T	3.3UH +-10%
L402	95A	90-	23		TIN COATED
L403	95A	90-	23		TIN COATED
L406	95A	90-	23		TIN COATED
L907	95A	90-	23		TIN COATED
Q101	57A	446-	1 -	T	2SC1213AC

LOCATION	**CMP556QAI**				**SPECIFICATION**
Q401	57A	419-	P -	T	TRAN 2SC945P/NEC TAPING
Q401	57A	419-	SG -	T	KSC945C-G TA FAIRCHILD
Q404	57A	420-	P -	T	TRAN 2SA733P/NEC TAPING
Q404	57A	420-	SG -	T	KSA733C-G TA FAIRCHILD
Q405	57A	420-	P -	T	TRAN 2SA733P/NEC TAPING
Q405	57A	420-	SG -	T	KSA733C-G TA FAIRCHILD
Q407	57A	419-	P -	T	TRAN 2SC945P/NEC TAPING
Q407	57A	419-	SG -	T	KSC945C-G TA FAIRCHILD
Q408	57A	419-	P -	T	TRAN 2SC945P/NEC TAPING
Q408	57A	419-	SG -	T	KSC945C-G TA FAIRCHILD
Q703	57A	419-	P -	T	TRAN 2SC945P/NEC TAPING
Q703	57A	419-	SG -	T	KSC945C-G TA FAIRCHILD
Q704	57A	420-	P -	T	TRAN 2SA733P/NEC TAPING
Q704	57A	420-	SG -	T	KSA733C-G TA FAIRCHILD
Q707	57A	419-	Y -	T	TR. 2SC1815Y TOSHIBA
Q902	57A	446-	1 -	T	TRAN.2SC1213AC/HITACHI
Q902	57A	446-	2 -	T	2SC2120 “0”
Q903	57A	419-	P -	T	TRAN 2SC945P/NEC TAPING
Q904	57A	594-	1T		TR.MPSA44/MOTOROLA
Q904	57A	594-	501 -	T	2N6517 SAMSUNG
Q904	57A	594-	504 -	T	KSP44TA
Q904	57A	594-	510 -	T	HMPS A44/HI-SINCERITY
Q905	57A	420-	P -	T	TRAN 2SA733P/NEC TAPING
Q908	57A	419-	P -	T	TRAN 2SC945P/NEC TAPING
Q908	57A	419-	SG -	T	KSC945C-G TA FAIRCHILD
Q910	57A	419-	P -	T	TRAN 2SC945P/NEC TAPING
Q910	57A	419-	SG -	T	KSC945C-G TA FAIRCHILD
Q912	57A	446-	1 -	T	TRAN 2SC945P/NEC TAPING
Q912	57A	446-	3 -	T	TOSHIBA 2SC2120-Y
Q913	95A	419-	SG -	T	KSC945C-G TA FAIRCHILD
Q914	95A	90-	23		TIN COATED
Q920	57A	619-	1 -	T	2SA673C/HITACHI
Q920	57A	727-	2 -	T	2SA673C
R1	61A	175L-	103 -	52T	10K OHM +-5% 1/2W
R100	61A	602-	472 -	52T	4.7K OHM +-5% 1/6W
R101	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R102	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R103	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R104	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R105	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R106	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R107	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R108	61A	602-	512 -	52T	5.1K OHM +-5% 1/6W
R109	61A	602-	512 -	52T	5.1K OHM +-5% 1/6W
R110	61A	602-	221 -	52T	220 OHM +-5% 1/6W
R111	61A	602-	221 -	52T	220 OHM +-5% 1/6W
R112	61A	602-	622 -	52T	6.2K OHM +-5% 1/6W
R113	61A	602-	103 -	52T	10K OHM +-5% 1/6W
R114	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R116	61A	602-	472 -	52T	4.7K OHM +-5% 1/6W
R117	61A	602-	101 -	52T	100 OHM +-5% 1/6W
R118	61A	602-	103 -	52T	10K OHM +-5% 1/6W

R119	61A	602-	103 -	52T	10K OHM +-5% 1/6W
R122	61A	172-	221 -	52T	220 OHM +-5% 1/4W
R123	61A	602-	472 -	52T	4.7K OHM +-5% 1/4W
R124	61A	602-	332 -	52T	3.3K OHM +-5% 1/4W
R126	61A	172-	202 -	52T	2K OHM +-5% 1/4W
R132	61A	602-	101 -	52T	100 OHM +-5% 1/6W
R135	61A	602-	152 -	52T	1.5K OHM +-5% 1/6W
R136	61A	602-	222 -	52T	2.2K OHM +-5% 1/6W
R140	61A	602-	472 -	52T	4.7K OHM +-5% 1/6W
R141	61A	602-	222 -	52T	2.2K OHM +-5% 1/6W
R143	61A	602-	101 -	52T	100 OHM +-5% 1/6W
R149	61A	602-	152 -	52T	1.5K OHM +-5% 1/6W
R156	61A	602-	103 -	52T	10K OHM +-5% 1/6W
R157	61A	602-	103 -	52T	10K OHM +-5% 1/6W
R160	61A	602-	221 -	52T	220 OHM +-5% 1/6W
R161	61A	602-	222 -	52T	2.2K OHM +-5% 1/6W
R162	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R165	61A	602-	222 -	52T	2.2K OHM +-5% 1/6W
R166	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R170	95A	90-	23		TIN COATED
R172	61A	602-	101 -	52T	100 OHM +-5% 1/6W
R180	61A	602-	362 -	52T	3.6K OHM +-5% 1/6W
R185	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R2	61A	175L-	103 -	52T	10K OHM +-5% 1/2W
R402	61A	172-	222 -	52T	2.2K OHM +-5% 1/4W
R403	61A	602-	101 -	52T	100 OHM +-5% 1/6W
R404	61A	602-	101 -	52T	100 OHM +-5% 1/6W
R405	61A	602-	102 -	52T	1K OHM +-5% 1/6W
R406	61A	602-	222 -	52T	2.2K OHM +-5% 1/6W
R408	61A	172-	304 -	52T	300K OHM +-5% 1/4W
R410	61A	210-	472 -	52T	4.7K OHM +-1% 1/6W
R411	61A	602-	182 -	52T	1.8K OHM +-5% 1/6W
R412	61A	602-	183 -	52T	18K OHM +-5% 1/6W
R414	61A	172-	332 -	52T	3.3K OHM +-5% 1/4W
R415	61A	172-	623 -	52T	62K OHM +-5% 1/4W
R416	61A	210-	223 -	52T	22K OHM +-1% 1/6W
R417	61A	602-	101 -	52T	100 OHM +-5% 1/6W
R418	61A	210-	472 -	52T	4.7K OHM +-1% 1/6W

LOCATION	**CMP556QAI**				**SPECIFICATION**
R420	61A	172-	472 -	52T	4.7K OHM +-5% 1/4W
R421	61A	172-	222 -	52T	2.2K OHM +-5% 1/4W
R422	61A	602-	101 -	52T	100 OHM +-5% 1/6W
R423	61A	602-	203 -	52T	20K OHM +-5% 1/6W
R425	61A	172-	221 -	52T	220 OHM +-5% 1/4W
R427	61A	175L-	220 -	52T	22 OHM +-5% 1/2W
R429	61A	175L-	100 -	52T	10 OHM +-5% 1/2W
R430	61A	172-	154 -	52T	150K OHM +-5% 1/4W
R431	95A	90-	23		TIN COATED
R433	61A	602-	222 -	52T	2.2K OHM +-5% 1/6W
R434	61A	602-	392 -	52T	3.9K OHM +-5% 1/6W
R435	61A	172-	471 -	52T	470 OHM +-5% 1/4W
R436	61A	602-	681 -	52T	680OHM +-5% 1/6W
R440	61A	602-	562 -	52T	5.6KOHM +-5% 1/6W
R441	61A	175L-	823 -	52T	82K OHM +-5% 1/2W
R442	61A	172-	202 -	52T	2K OHM +-5% 1/4W
R443	61A	172-	473 -	52T	47K OHM +-5% 1/4W
R447	61A	172-	473 -	52T	47K OHM +-5% 1/4W
R448	61A	172-	202 -	52T	2K OHM +-5% 1/4W
R449	61A	172-	472 -	52T	4.7K OHM +-5% 1/4W
R450	61A	602-	563 -	52T	56K OHM +-5% 1/6W

R460	61A 172- 472 - 52T	4.7K OHM +-5% 1/4W
R462	61A 602- 243 - 52T	24K OHM +-5% 1/6W
R471	61A 602- 563 - 52T	56K OHM +-5% 1/6W
R497	61A 210- 242 - 52T	2.4K OHM +-5% 1/6W
R601	61A 172- 243 - 52T	24K OHM +-5% 1/4W
R602	61A 172- 392 - 52T	3.9K OHM +-5% 1/4W
R603	61A 172- 123 - 52T	12K OHM +-5% 1/4W
R604	61A 172- 562 - 52T	5.6K OHM +-5% 1/4W
R605	61A 175L- 159 - 52T	1.5 OHM +-5% 1/2W
R610	61A 172- 124 - 52T	120K OHM +-5% 1/4W
R611	61A 172- 563 - 52T	56K OHM +-5% 1/4W
R612	61A 172- 222 - 52T	2.2K OHM +-5% 1/4W
R613	61A 172- 102 - 52T	1K OHM +-5% 1/4W
R614	61A 172- 243 - 52T	24K OHM +-5% 1/4W
R701	61A 602- 563 - 52T	56K OHM +-5% 1/6W
R707	61A 602- 472 - 52T	4.7K OHM +-5% 1/6W
R708	61A 602- 103 - 52T	10K OHM +-5% 1/6W
R709	61A 602- 103 - 52T	10K OHM +-5% 1/6W
R710	61A 602- 103 - 52T	10K OHM +-5% 1/6W
R711	61A 602- 103 - 52T	10K OHM +-5% 1/6W
R712	61A 602- 273 - 52T	27K OHM +-5% 1/6W
R713	61A 602- 562 - 52T	5.6K OHM +-5% 1/6W
R714	95A 90- 23	TIN COATED
R715	61A 602- 103 - 52T	1K OHM +-5% 1/6W
R720	61A 175L- 104 - 52T	100K OHM +-5% 1/4W
R721	61A 175L- 102 - 52T	1K OHM +-5% 1/2W
R722	95A 90- 23	TIN COATED
R724	61A 175L- 105 - 52T	1MEG OHM +-5% 1/4W
R725	61A 212Y- 154 - 52T	150K OHM 1/2W
R726	61A 602- 102 - 52T	1K OHM +-5% 1/6W
R727	61A 175L- 823 - 52T	82K OHM +-5% 1/2W
R728	61A 172- 561 - 52T	560 OHM +-5% 1/4W
R729	61A 602- 470 - 52T	47 OHM +-5% 1/6W
R730	95A 90- 23	TIN COATED
R750	61A 212Y- 124 - 52T	120K OHM +-5% 1/2W
R900	61A 172- 470 - 52T	47 OHM +-5% 1/4W
R901	61A 175L- 474 - 52T	470K OHM +-5% 1/2W
R902	61A 602- 103 - 52T	10K OHM +-5% 1/6W
R905	61A 602- 622 - 52T	6.2K OHM +-5% 1/6W
R906	95A 90- 23	TIN COATED
R907	61A 602- 102 - 52T	1K OHM +-5% 1/6W
R908	61A 602- 470 - 52T	47 OHM +-5% 1/6W
R909	61A 602- 101 - 52T	100 OHM +-5% 1/6W
R910	61A 602- 913 - 52T	91K OHM +-5% 1/6W
R917	61A 212Y- 474 - 52T	470K 1/2W
R918	61A 212Y- 474 - 52T	470K 1/2W
R922	61A 172- 273 - 52T	27K OHM +-5% 1/4W
R925	61A 172- 243 - 52T	24K OHM +-5% 1/4W
R926	61A 172- 183 - 52T	18K OHM +-5% 1/4W

LOCATION	**CMP556QAI**	**SPECIFICATION**
R930	61A 172- 202 - 52T	2K OHM +-5% 1/4W
R931	61A 200- 109 - 52T	1 OHM +-1% 1/4W
R932	61A 172- 222 - 52T	2.2K OHM +-5% 1/4W
R933	61A 172- 361 - 52T	360 OHM +-5% 1/4W
R934	61A 172- 102 - 52T	1K OHM +-5% 1/4W
R935	61A 172- 334 - 52T	330K OHM +-5% 1/4W
R937	61A 172- 151 - 52T	150 OHM +-5% 1/4W
R938	61A 172- 220 - 52T	22 OHM +-5% 1/4W
R939	61A 172- 203 - 52T	20K OHM +-5% 1/4W

R940	61A	172-	393 -	52T	39K OHM +-2% 1/4W
R941	61A	172-	152 -	52T	1.5K OHM +-5% 1/4W
R942	61A	172-	680 -	52T	68 OHM +-5% 1/4W
R950	61A	602-	243 -	52T	24K OHM +-5% 1/6W
R951	61A	172-	100 -	52T	10 OHM +-5% 1/4W
R952	61A	172-	473 -	52T	47K OHM +-5% 1/4W
R953	61A	172-	303 -	52T	30K OHM +-5% 1/4W
R956	61A	172-	122 -	52T	1.2K OHM +-5% 1/4W
R957	61A	172-	473 -	52T	47K OHM +-5% 1/4W
R958	61A	172-	102 -	52T	1K OHM +-5% 1/4W
R959	61A	172-	333 -	52T	33K OHM +-5% 1/4W
R960	61A	172-	473 -	52T	47K OHM +-5% 1/4W
R962	61A	172-	220 -	52T	22 OHM +-5% 1/4W
R963	61A	175L	201 -	52T	200 OHM +-5% 1/2W
R966	61A	172-	302 -	52T	3K OHM +-5% 1/4W
R967	61A	172-	132 -	52T	1.3K OHM +-5% 1/4W
R968	61A	172-	244 -	52T	240K OHM +-5% 1/4W
R969	61A	214Y-	753 -	52T	75K OHM +-5% 1/4W
R972	61A	172-	183 -	52T	18K OHM +-5% 1/4W
R977	61A	175L-	154 -	52T	150K OHM +-5% 1/2W
R980	61A	172-	221 -	52T	220 OHM +-5% 1/4W
R981	61A	175L-	101 -	52T	100 OHM +-5% 1/2W
R982	61A	172-	103 -	52T	10K OHM +-5% 1/4W
R983	61A	172-	103 -	52T	10K OHM +-5% 1/4W
R984	61A	172-	204 -	52T	200K OHM +-5% 1/4W
R986	61A	175L-	106 -	52T	10M OHM +-5% 1/2W
R988	61A	172-	223 -	52T	22K OHM +-5% 1/4W
R995	61A	602-	393 -	52T	39K OHM +-5% 1/6W
R996	61A	602-	103 -	52T	10K OHM +-5% 1/6W
ZD110	93A	39-	73 -	52T	HZ6B1/HITACHI
ZD403	93A	39-	54 -	52T	HZ12B2
ZD404	95A	90-	23		TIN COATED
ZD409	95A	39-	504 -	52T	HZ3B2/HITACHI
ZD409	95A	39-	504 -	52T	TZX3V0C
ZD420	93A	113-	522 -	52T	ZD HZ20-2/HITACHI
ZD420	93A	522-	522 -	52T	TZX20B
ZD701	93A	39-	518 -	52T	TZX8V2A
ZD701	93A	39-	57M -	52T	MTZJ8.2B
ZD702	93A	39-	49 -	52T	RD3.0EB2/NEC
ZD702	93A	39-	504 -	52T	HZ3B2/HITACHI
ZD702	93A	39-	515 -	52T	TZX3V0C
ZD902	93A	39-	55 -	52T	RD30EB4
ZD902	93A	39-	55M -	52T	MTZ J30D/R0HM
ZD902	93A	39-	55T -	52T	0.5W ZD BZX55C30 TFK
ZD903	93A	39-	124 -	52T	HZ 18-2/HITACHI
ZD903	93A	39-	521 -	52T	TZX18B

PARTS LIST OF CRT PC BOARD

LOCATION	CRPC556Q				SPECIFICATION
	40A	581-	26 -	605	LABEL
	55A	1-	4		SOLDER BAR
	55A	100-	2		SOLDER BAR
	55A	100-	5		SOLDER BAR
	87A	3503-	500		CRT SOCKET
	87A	3503-	501		CRT SOCKET
	705A	556Q	R56 -	02	IC802 ASS’Y
C812	67A	305-	102 -	3	1000UF +-20% 16V
C821	67A	305-	100 -	12J	10UF 250V 105C

C835	65A	2Z-	103 -	4B	0.01UF +80% -20% 2K Z5V
C837	67A	305-	470 -	10	47UF 160V
GND1	9A	203-	8		BRASS PIN
IC801	56A	539-	2		LM1279N
J806	71A	55-	26 -	K	FERRITE BEAD K5B RH 3.5
J806	71A	55-	26 -	S	FERRITE BEAD
JJ2	95A	202-	59 -	031	HOOK UP WIRE
P801	33A	3278-	11A		11P PLUG
P802	33A	3278-	9		9 PIN PLUG B9B-XHA/JST
P803	33A	3278-	6		6P PLUG
R807	61A	208-	390 -	64	39 OHM +-5% 1W

LOCATION	**CRPC556Q**				**SPECIFICATION**
R859	61A	152M-	101 -	64	100 OHM 5% 2W
R860	61A	175L-	104 -	52T	100K OHM 5% 1/2W
SG801	62A	10-	2 -	T	SPARK GAP 200V
SG801	62A	10-	2 -	JT	SPARK GAP 200V
SG801	62A	10-	2K		SPARK GAP KSA-201-MA
SG802	62A	10-	2 -	T	SPARK GAP 200V
SG802	62A	10-	2 -	JT	SPARK GAP 200V
SG802	62A	10-	2K		SPARK GAP KSA-201-MA
SG803	62A	10-	2 -	T	SPARK GAP 200V
SG803	62A	10-	2 -	JT	SPARK GAP 200V
SG803	62A	10-	2K		SPARK GAP KSA-201-MA
SG804	62A	10-	6		SPARK GAP 1KV
SG804	62A	10-	6 -	J	SPARK GAP 1KV
SG805	62A	10-	500		1.2KV SPARK GAP
SG805	62A	10-	500 -	J	GD120 SPARK GAP
VR801	75A	334-	222		2.2K OHM 25%
VR802	75A	334-	222		2.2K OHM 25%
VR803	75A	334-	303		30K OHM 25%
VR804	75A	334-	303		30K OHM 25%
VR805	75A	334-	303		30K OHM 25%

PARTS LIST OF CRT AUTO INS. PC BOARD

LOCATION	**CRP556QAI**				**SPECIFICATION**
	715A	723-	1A		CRPC BOARD
C801	67A	305-	100 -	7T	10uF +-20% 50V
C802	67A	305-	100 -	7T	10uF +-20% 50V
C803	67A	305-	100 -	7T	10uF +-20% 50V
C804	65A	450-	104 -	7T	0.1uF +80% -20% Y5V 50V
C805	65A	450-	104 -	7T	0.1uF +80% -20% Y5V 50V
C806	65A	450-	104 -	7T	0.1uF +80% -20% Y5V 50V
C807	67A	309-	100 -	7T	10uF +-20% 50V
C808	67A	309-	470 -	3T	47uF +-20% 16V
C809	65A	450-	104 -	7T	0.1uF +80% -20% Y5V 50V
C810	67A	305-	470 -	7T	47uF +-20% 50V
C811	65A	450-	104 -	7T	0.1uF +80% -20% Y5V 50V
C813	65A	176J-	224 -	0T	0.22uF +-5% Y5V 63V
C814	65A	450-	104 -	7T	0.1uF +80% -20% Y5V 50V
C815	65A	450-	104 -	7T	0.1uF +80% -20% Y5V 50V
C816	65A	450-	104 -	7T	0.1uF +80% -20% Y5V 50V
C818	67A	305-	470 -	7T	47uF +-20% 50V
C819	65A	450-	104 -	7T	0.1uF +80-20% Y5P 50V

C820	65A	44J-	104 -	1AT	0.1UF +-5% 100V PEI
C820	65A	176J-	104 -	1T	0.1UF +-5% 100V
C828	67A	70-	478 -	9T	0.47uF 100V NP
C829	67A	70-	478 -	9T	0.47uF 100V NP
C830	67A	70-	478 -	9T	0.47uF 100V NP
C831	64A	176J-	104 -	1T	0.1uF +-5% 100V
C832	64A	176J-	104 -	1T	0.1uF +-5% 100V
C833	64A	176J-	104 -	1T	0.1uF +-5% 100V
C834	65A	44J-	104 -	1AT	0.1uF +-5% 100V PEI
C834	65A	46J-	104 -	0T	0.1uF +-5% 50V LD BY TAI
C834	65A	176J-	104 -	1T	0.1uF +-5% 100V
C836	65A	1K-	221 -	5T	220PF/1KV Y5P+-10%
C838	65A	444-	102 -	13T	1000PF +-10% Y5P 50V
C840	65A	517K-	102 -	5T	1000PF +-10% Y5P 500V
C841	65A	517K-	102 -	5T	1000PF +-10% Y5P 500V
C842	65A	517K-	102 -	5T	1000PF +-10% Y5P 500V
C861	65A	517M-	103 -	3T	10NF/500V Z5U +-20%
C863	65A	444-	101 -	5T	100PF +-10% Y5P 50V
D801	93A	64-	11 -	52T	DIODE IN4148
D802	93A	64-	11 -	52T	DIODE IN4148
D803	93A	64-	11 -	52T	DIODE IN4148
D804	93A	64-	11 -	52T	DIODE IN4148
D805	93A	64-	11 -	52T	DIODE IN4148
D806	93A	64-	11 -	52T	DIODE IN4148
D807	93A	64-	11 -	52T	DIODE IN4148
D808	93A	64-	19 -	52T	DIODE 1SS83/HIACHI
D808	93A	64-	19G -	52T	BAV21/G.I
D808	93A	64-	501 -	52T	SWITCHING DIODE BAV21
D808	93A	64-	507 -	52T	FAST RECOVERY DIODE BAV2
D809	93A	64-	19 -	52T	DIODE 1SS83/HIACHI
D809	93A	64-	19G -	52T	BAV21/G.I
D809	93A	64-	501 -	52T	SWITCHING DIODE BAV21
D809	93A	64-	507 -	52T	FAST RECOVERY DIODE BAV2
D810	93A	64-	19 -	52T	DIODE 1SS83/HIACHI
D810	93A	64-	19G -	52T	BAV21/G.I
D810	93A	64-	501 -	52T	SWITCHING DIODE BAV21
D810	93A	64-	507 -	52T	FAST RECOVERY DIODE BAV2
D811	93A	64-	19 -	52T	DIODE 1SS83/HIACHI
D811	93A	64-	19G -	52T	BAV21/G.I
D811	93A	64-	501 -	52T	SWITCHING DIODE BAV21
D811	93A	64-	507 -	52T	FAST RECOVERY DIODE BAV2
D812	93A	64-	19 -	52T	DIODE 1SS83/HIACHI
D812	93A	64-	19G -	52T	BAV21/G.I
D812	93A	64-	501 -	52T	SWITCHING DIODE BAV21
D812	93A	64-	507 -	52T	FAST RECOVERY DIODE BAV2
D813	93A	64-	19 -	52T	DIODE 1SS83/HIACHI
D813	93A	64-	19G -	52T	BAV21/G.I
D813	93A	64-	501 -	52T	SWITCHING DIODE BAV21
D813	93A	64-	507 -	52T	FAST RECOVERY DIODE BAV2
D814	93A	64-	19 -	52T	DIODE 1SS83/HIACHI
D814	93A	64-	19G -	52T	BAV21/G.I
D814	93A	64-	501 -	52T	SWITCHING DIODE BAV21
D814	93A	64-	507 -	52T	FAST RECOVERY DIODE BAV2
D815	93A	64-	19 -	52T	DIODE 1SS83/HIACHI
D815	93A	64-	19G -	52T	BAV21/G.I
D815	93A	64-	501 -	52T	SWITCHING DIODE BAV21
D815	93A	64-	507 -	52T	FAST RECOVERY DIODE BAV2
D816	93A	64-	19 -	52T	DIODE 1SS83/HIACHI
D816	93A	64-	19G -	52T	BAV21/G.I
D816	93A	64-	501 -	52T	SWITCHING DIODE BAV21
D816	93A	64-	507 -	52T	FAST RECOVERY DIODE BAV2
D817	93A	52-	1P -	52T	1N4005
D817	93A	52-	1T -	52T	1A 600V 1N4005

J801	95A	90-	23		TIN COATED
J802	95A	90-	23		TIN COATED
J803	95A	90-	23		TIN COATED
J804	95A	90-	23		TIN COATED
J805	95A	90-	23		TIN COATED

LOCATION	**CRP556QAI**				**SPECIFICATION**
J807	95A	90-	23		TIN COATED
J808	95A	90-	23		TIN COATED
J809	95A	90-	23		TIN COATED
J810	95A	90-	23		TIN COATED
J818	95A	90-	23		TIN COATED
J819	95A	90-	23		TIN COATED
J820	95A	90-	23		TIN COATED
L801	73A	54-	479 -	5T	4.7UH
L805	73A	54-	478 -	10T	0.47UH +-10% peaking coi
L806	73A	54-	478 -	10T	0.47UH +-10% peaking coi
L807	73A	54-	478 -	10T	0.47UH +-10% peaking coi
L808	73A	54-	479 -	5T	4.7UH
L809	73A	54-	109 -	5T	1uH+-5% peaking coi
L810	73A	54-	109 -	5T	1uH+-5% peaking coi
L811	73A	54-	109 -	5T	1uH+-5% peaking coi
Q813	57A	419-	P -	T	TRAN 2SC945P/NEC TAPING
Q813	57A	419-	SG -	T	KSC945C-G TA FAIRCHILD
Q814	57A	742-	1 -	T	KSC1730-0/Y
R801	61A	602-	750 -	26T	75 OHM 5% 1/6W
R802	61A	602-	750 -	26T	75 OHM 5% 1/6W
R803	61A	602-	750 -	26T	75 OHM 5% 1/6W
R804	61A	602-	300 -	26T	30 OHM 5% 1/6W
R805	61A	602-	300 -	26T	30 OHM 5% 1/6W
R806	61A	602-	300 -	26T	30 OHM 5% 1/6W
R808	61A	602-	103 -	26T	10K OHM 5% 1/6W
R809	61A	172-	225 -	26T	2.2 M OHM 5% 1/4W
R810	61A	602-	101 -	26T	100 OHM 5% 1/6W
R811	61A	602-	332 -	26T	3.3K OHM 5% 1/6W
R812	61A	602-	132 -	26T	1.3K OHM 5% 1/6W
R813	61A	602-	332 -	26T	3.3K OHM 5% 1/6W
R814	61A	602-	332 -	26T	3.3K OHM 5% 1/6W
R815	61A	602-	391 -	26T	390 OHM 5% 1/6W
R816	61A	602-	391 -	26T	390 OHM 5% 1/6W
R817	61A	602-	391 -	26T	390 OHM 5% 1/6W
R818	61A	602-	100 -	26T	10 OHM +-5% 1/6W
R819	61A	602-	100 -	26T	10 OHM +-5% 1/6W
R820	61A	602-	100 -	26T	10 OHM +-5% 1/6W
R821	95A	90-	23		TIN COATED
R823	61A	602-	121 -	52T	120 OHM 5% 1/6W
R824	61A	602-	121 -	52T	120 OHM 5% 1/6W
R825	61A	602-	121 -	52T	120 OHM 5% 1/6W
R826	95A	90-	23		TIN COATED
R840	61A	172-	102 -	26T	1K OHM 5% 1/4W
R841	61A	172-	102 -	26T	1K OHM 5% 1/4W
R842	61A	172-	102 -	26T	1K OHM 5% 1/4W
R846	61A	602-	393 -	26T	39K OHM +-5% 1/6W
R847	61A	602-	393 -	26T	39K OHM +-5% 1/6W
R848	61A	602-	393 -	26T	39K OHM +-5% 1/6W
R849	61A	172-	105 -	26T	1MEG OHM +-5% 1/4W
R850	61A	172-	105 -	26T	1MEG OHM +-5% 1/4W
R851	61A	172-	105 -	26T	1MEG OHM +-5% 1/4W
R855	61A	175L-	560 -	52T	56 OHM +-5% 1/2W
R856	61A	175L-	560 -	52T	56 OHM +-5% 1/2W
R857	61A	175L-	560 -	52T	56 OHM +-5% 1/2W

R858	95A	90-	23		TIN COATED
R861	61A	602-	822 -	26T	8.2K OHM +-5% 1/6W
R862	61A	602-	222 -	26T	2.2K OHM +-5% 1/6W
R863	95A	90-	23		TIN COATED
R864	61A	175L-	471 -	52T	470 OHM +-5% 1/2W
ZD801	93A	39-	57 -	52T	RD8.2EB3/NEC. 8.07~8.41V
ZD801	93A	39-	519 -	52T	TZX8V2B
ZD801	93A	39-	57M -	52T	MTZJ8.2B

PARTS LIST OF IC802 ASS'Y

LOCATION	PARTS No.				SPECIFICATION
	51A	200-	1		SILICONE RUBBER
	90A	355-	2		HEAT SINK
	M1A	1730-	8 -	128	SCREW
IC802	56A	551-	3		LM2438T

PARTS LIST OF IC101 CPU ASS'Y

LOCATION	PARTS No.				SPECIFICATION
IC101	56A	1125-	33		NT6861B-08066

PARTS LIST OF AC LINET ASS'Y

LOCATION	PARTS No.				SPECIFICATION
	95A	205S-	354 -	043	WIRE ASS'Y
	96A	29-	6 -	190	H.S. TUBING
CN901	87A	501-	5		RECEPTACLES 0714

PARTS LIST OF Q403 ASS'Y

LOCATION	PARTS No.				SPECIFICATION
	5A	42-	501		NYLON WASHER
	32A	3028-	8		MICA
	90A	354-	506		HEAT SINK
	M1A	1730-	8 -	128	SCREW
	M1A	1730-	10 -	128	SCREW
D408	93A	220-	12		FMP-2FUR 1500/600V 5A
D408	93A	220-	11G		DMV32 ST
Q403	57A	706-	9 -	P	2SC5220P
Q403	57A	7.6-	9 -	Q	2SC5220Q
Q406	57A	415-	1		TR.NPN TIP122/FAIRCHILD
Q406	57A	415-	3		2SD2025 BY ROHM

PARTS LIST OF Q901 ASS'Y

LOCATION	PARTS No.				SPECIFICATION
	5A	42-	501		NYLON WASHER
	32A	3028-	8		MICA
	51A	200-	1		SILICONE RUBBER
	90A	339-	2 -	A	HEAT SINK
	M1A	1730-	10 -	128	SCREW
Q901	57A	667-	6		FS10M-12
Q901	57A	667-	7		IRFBC40 I.R. MOSFET

PARTS LIST OF Q911 ASS'Y

LOCATION	PARTS No.				SPECIFICATION
	5A	42-	501		NYLON WASHER
	32A	3028-	8		MICA
	51A	200-	1		SILICONE RUBBER
	90A	315-	1		HEAT SINK
	M1A	1730-	8 -	128	SCREW M3x10
Q911	57A	600-	504		MOS FET IRF634A

PARTS LIST OF IC904 ASS'Y

LOCATION	PARTS No.				SPECIFICATION
	51A	200-	1		SILICONE RUBBER
	90A	315-	1		HEAT SINK
	M1A	1730-	6 -	128	SCREW
IC904	56A	133-	12 -	ST	3 PIN 12V REG.L7812CV SG
IC904	56A	133-	12 -	STM	L7812CV/MOROCCO

PARTS LIST OF IC601 ASS'Y

LOCATION	PARTS No.				SPECIFICATION
	5A	42-	501		NYLON WASHER
	11A	6007-	2		BUSHING
	32A	3028-	8		MICA
	90A	348-	501		HEAT SINK
	M1A	1730-	10 -	128	SCREW M3x10
IC601	56A	574-	1		TDA9302H BY SGS

PARTS LIST OF CAB'T ASS'Y

LOCATION	PARTS No.				SPECIFICATION
	12A	381-	500		RUBBER FOOT
	19A	506-	5		SPRING
	33A	3674-	1		POWER LED LENS
	33A	3732-	370		POWER BUTTON
	34A	611-	370 -	A	SWIVEL
	34A	612-	370 -	A	BASE
	34A	624D-	370 -	2A	BACK COVER
	41A	68-	700 -	2A	CARD
	41A	541-	700 -	1C	MANAUL
	45A	76-	31 -	RN	BASE & SWIVEL PE
	45A	76-	28 -	D	MANUAL PE BAG FOR D
	70A	2000-	2 -	DE	CD.ROM

PARTS LIST OF CRT ALTERNATION

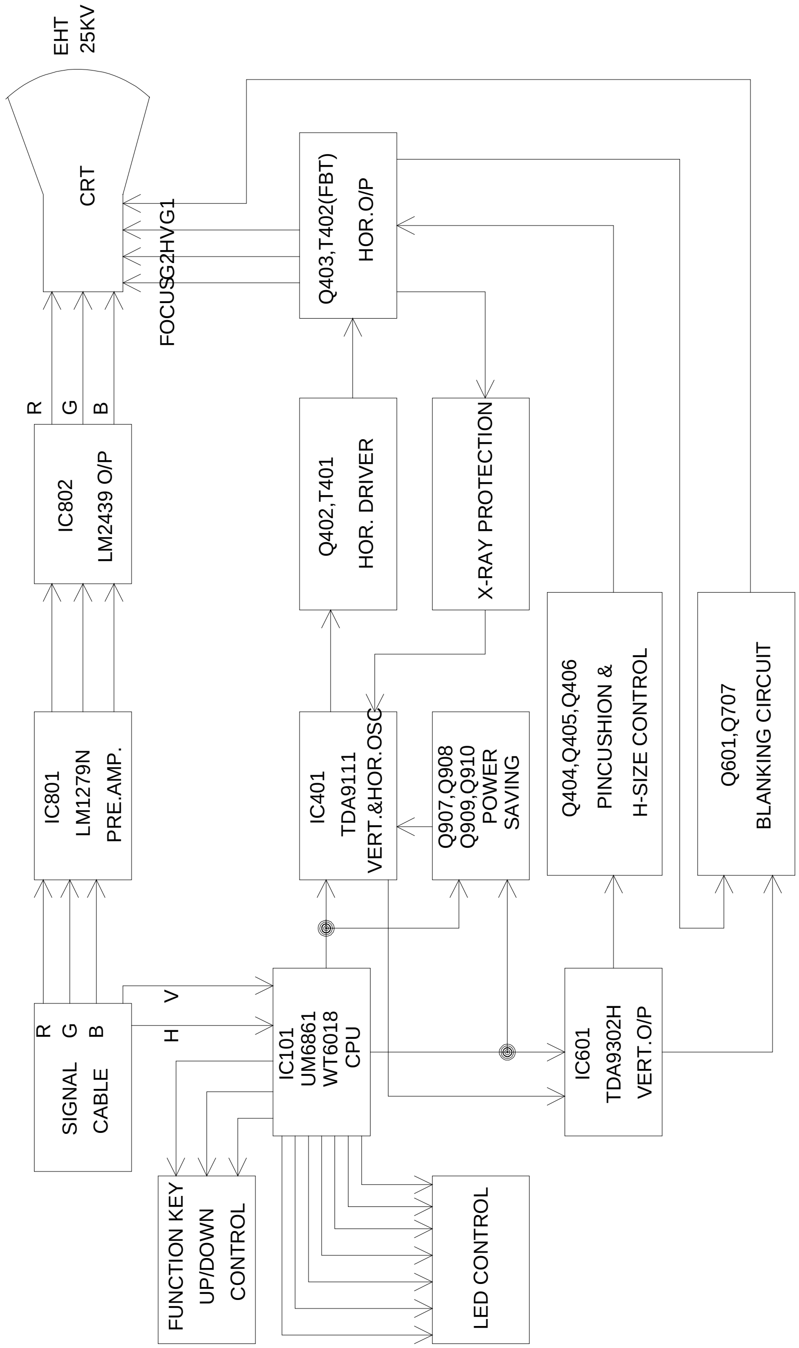
LOCATION	PARTS No.				SPECIFICATION
	750A	5910-	5PS -		15” CHUNGHWA .28 CRT
C414	64A	176J-	104 -	1T	0.1UF 5% 100V
C418	63A	210J-	432 -	8CC	4.3Nf/2kv =-5%
C419	63A	210J-	682 -	7CC	6800P/1600V
C422	64A	100J-	225 -	59	2.2UF/100V MEF
C425	63A	210J-	244 -	3CC	0.24UF 400V
C425	63A	210J-	244 -	3CH	0.24UF
C425	63A	210J-	244 -	3CM	0.24UF 400V PMH BY MYLAR
C430	93A	60-	21 -	52T	FRD 1.5A 500V FR155/RECTP
C430	93A	60-	21P -	52T	PS156R
C430	93A	60-	21T -	52T	FR155
C430	93A	60-	21Z -	52T	TFR155
P404	33A	8009-	3		3P PLUG
R409	61A	172-	364 -	52T	360K OHM 5% 1/4W
R456	61A	153M-	271 -	59	270 OHM 5% 3W
R461	61A	153M-	151 -	59	150 OHM +-5% 3W
R470	61A	602-	153 -	52T	15K OHM 5% 1/6W
R490	61A	210-	473 -	52T	47K OHM 1% 1/6W
R606	61A	175L-	181 -	52T	180 OHM 5% 1/2W
R607	61A	208-	918 -	64	0.91 OHM 1W 5%
R609	61A	172-	564 -	52T	560K OHM 5% 1/4W

LOCATION	PARTS No.				SPECIFICATION
	750A	5910-	7PS		15” CPT M36AES83X01 CRT D
C414	64A	176J-	104 -	1T	0.1UF 5% 100V
C418	63A	210J-	432 -	8CC	4.3Nf/2kv =-5%
C419	63A	210J-	682 -	7CC	6800P/1600V
C422	64A	100J-	225 -	59	2.2UF/100V MEF
C425	63A	210J-	244 -	3CC	0.24UF 400V
C425	63A	210J-	244 -	3CH	0.24UF
C425	63A	210J-	244 -	3CM	0.24UF 400V PMH BY MYLAR
C430	93A	60-	21 -	52T	FRD 1.5A 500V FR155/RECTP
C430	93A	60-	21P -	52T	PS156R
C430	93A	60-	21T -	52T	FR155
C430	93A	60-	21Z -	52T	TFR155
P404	33A	8009-	3		3P PLUG
R409	61A	172-	204 -	52T	200K OHM 5% 1/4W
R456	61A	153M-	271 -	59	270 OHM 5% 3W
R461	61A	153M-	151 -	59	150 OHM +-5% 3W
R470	61A	602-	153 -	52T	15K OHM 5% 1/6W
R490	61A	210-	473 -	52T	47K OHM 1% 1/6W
R606	61A	175L-	181 -	52T	180 OHM 5% 1/2W
R607	61A	208-	918 -	64	0.91 OHM 1W 5%
R609	61A	172-	564 -	52T	560K OHM 5% 1/4W
R607	61A	208-	758 -	64	0.75 OHM 1W

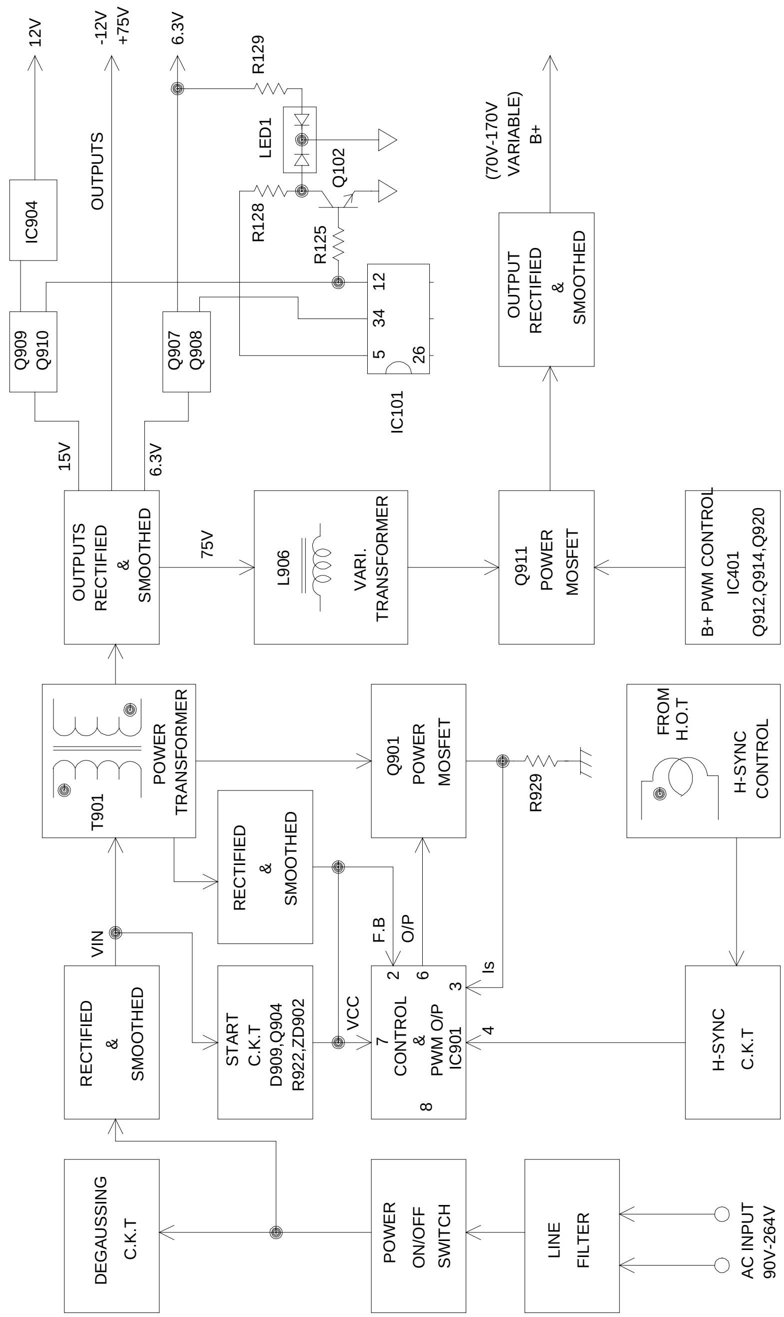
LOCATION	PARTS No.				SPECIFICATION
	750A	5932-	1AV		15” PHILIPS MPRII CRT
	750A	5910-	5PS -		15” CHUNGHWA .28 CRT
C414	67A	305-	470 -	9	47UF 5% 100V
C418	63A	210J-	532 -	8CC	4.3Nf/2kv =-5%
C419	63A	210J-	682 -	8FC	5300PF 2KV
C422	64A	210J-	684 -	2DC	0.68UF +-5% 250V CAMEL
C422	64A	210J-	684 -	2DH	0.68UF CAMEL
C422	64A	210J-	684 -	2DM	0.68UF +-5% 250V (PMH)
C425	63A	210J-	244 -	3CC	0.24UF 400V
C425	63A	210J-	244 -	3CH	0.24UF

C425	63A	210J-	244 -	3CM	0.24UF 400V PMH BY MYLAR
C430	65A	1K-	152 -	1A	1500PF 10% Z5F 1KV
P404	33A	8009-	3		3P PLUG
R409	61A	172-	204 -	52T	200K OHM 5% 1/4W
R456	61A	153M-	391 -	59	390 OHM +-5% 3W
R461	95A	90-	23		TIN COATED
R470	61A	602-	912 -	52T	9.1K OHM 5% 1/6W
R490	61A	210-	623 -	52T	62K OHM 1% 1/6W
R606	61A	175L-	221 -	52T	220 OHM 5% 1/2W
R607	61A	208-	758 -	64	0.75 OHM 1W 5%
R609	61A	172-	154 -	52T	150K OHM 5% 1/4W

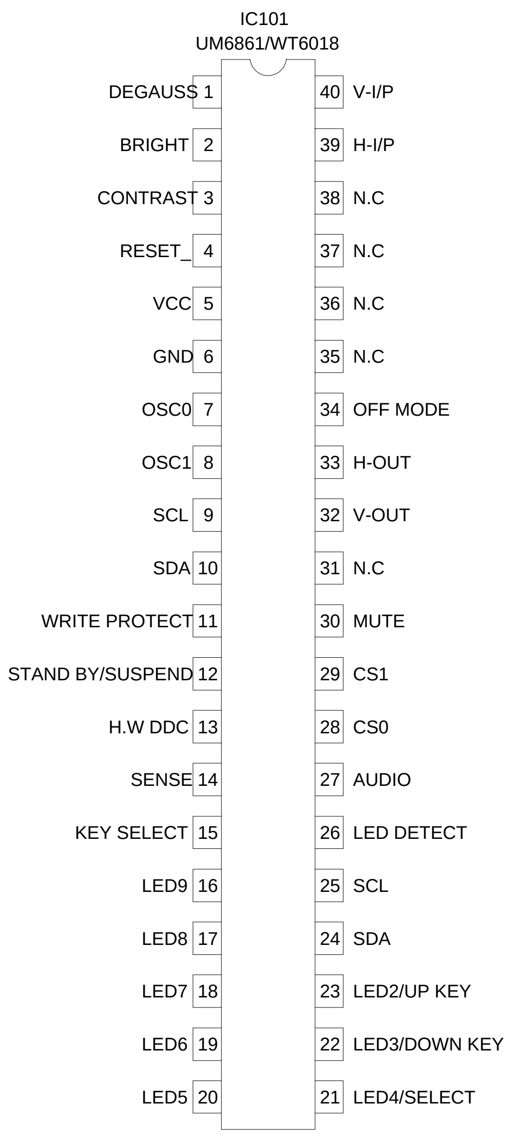
9. BLOCK DIAGRAM (DEFLECTION)

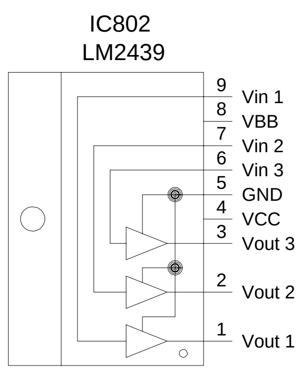


9-1. BLOCK DIAGRAM (SMPS)

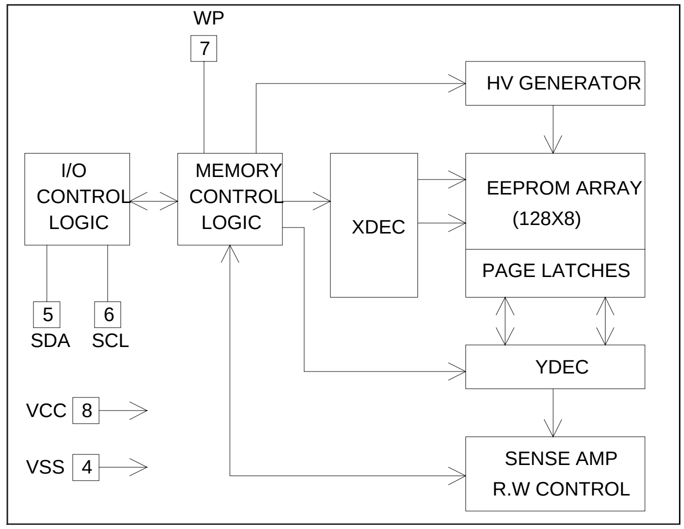


10. IC BLOCK DIAGRAMS

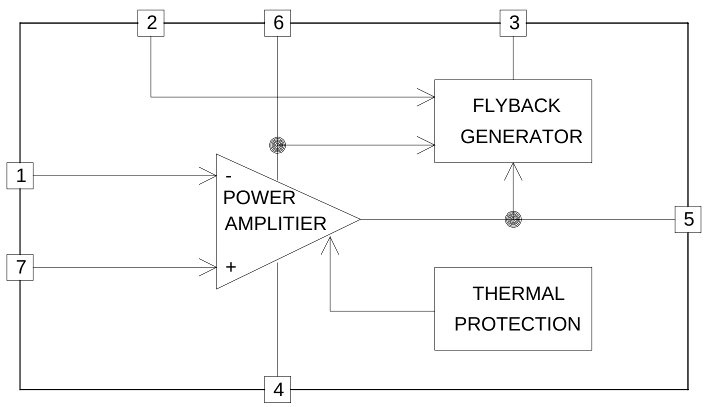




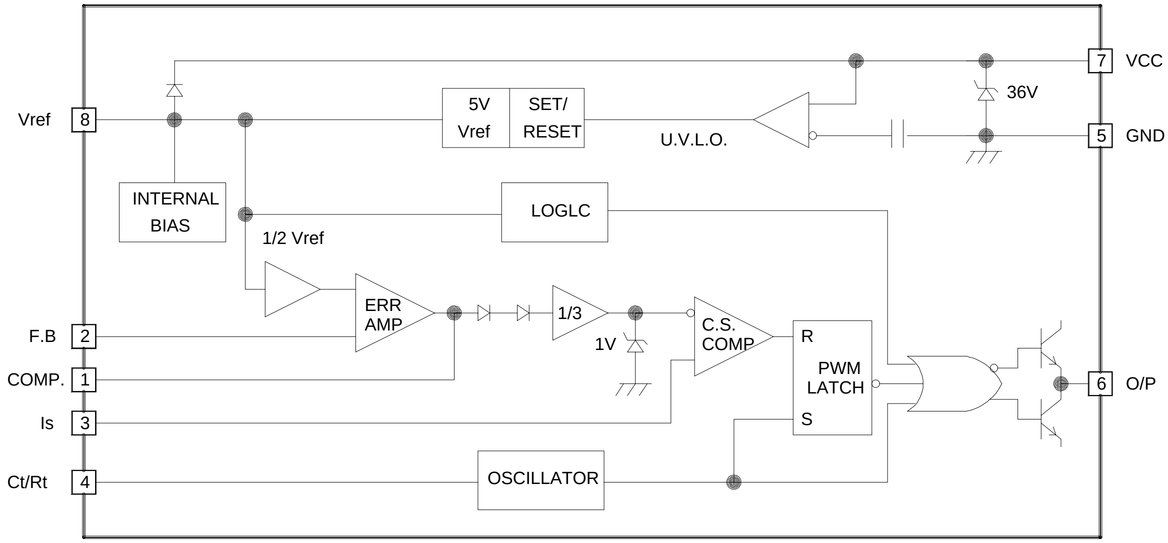
IC102 24C04



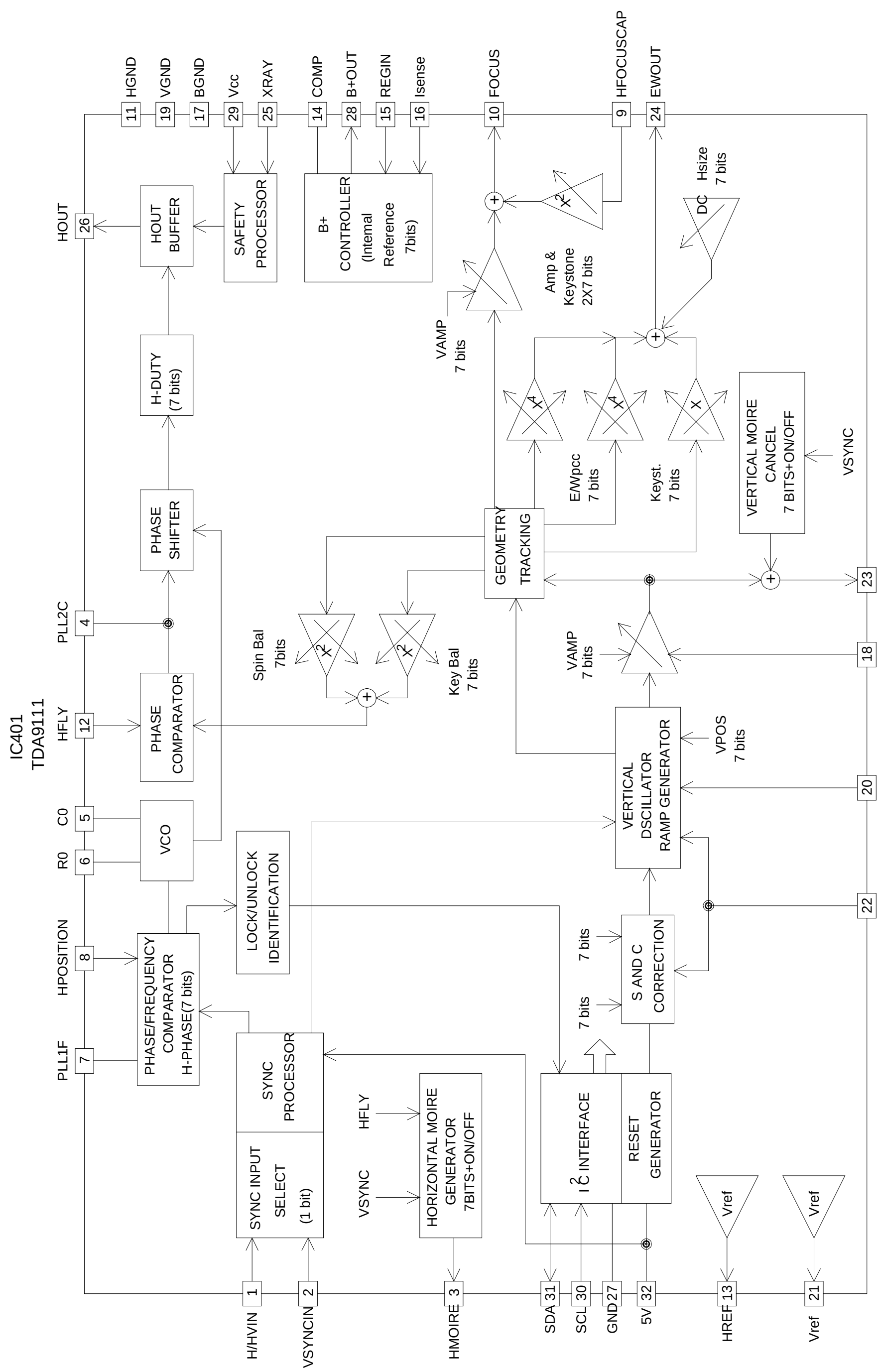
IC601 TDA9302H



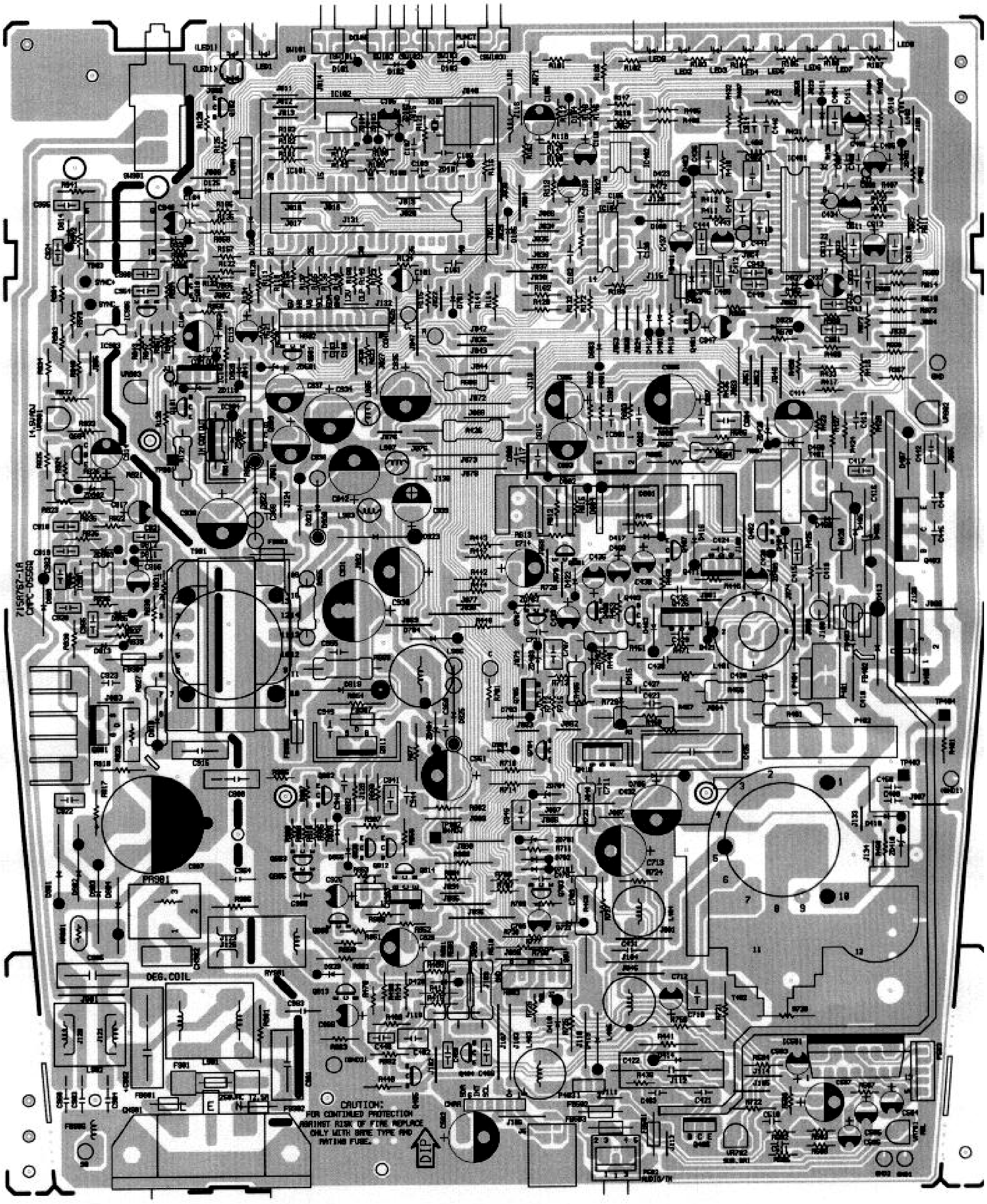
IC901 3842



Vref
8
INTERNAL
BIAS
5V
Vref
SET/
RESET
U.V.L.O.
7
VCC
36V
5
GND
LOGLC
1/2 Vref
ERR
AMP
1/3
1V
C.S.
COMP
R
PWM
LATCH
S
F.B
2
COMP.
1
Is
3
Ct/Rt
4
OSCILLATOR
6
O/P

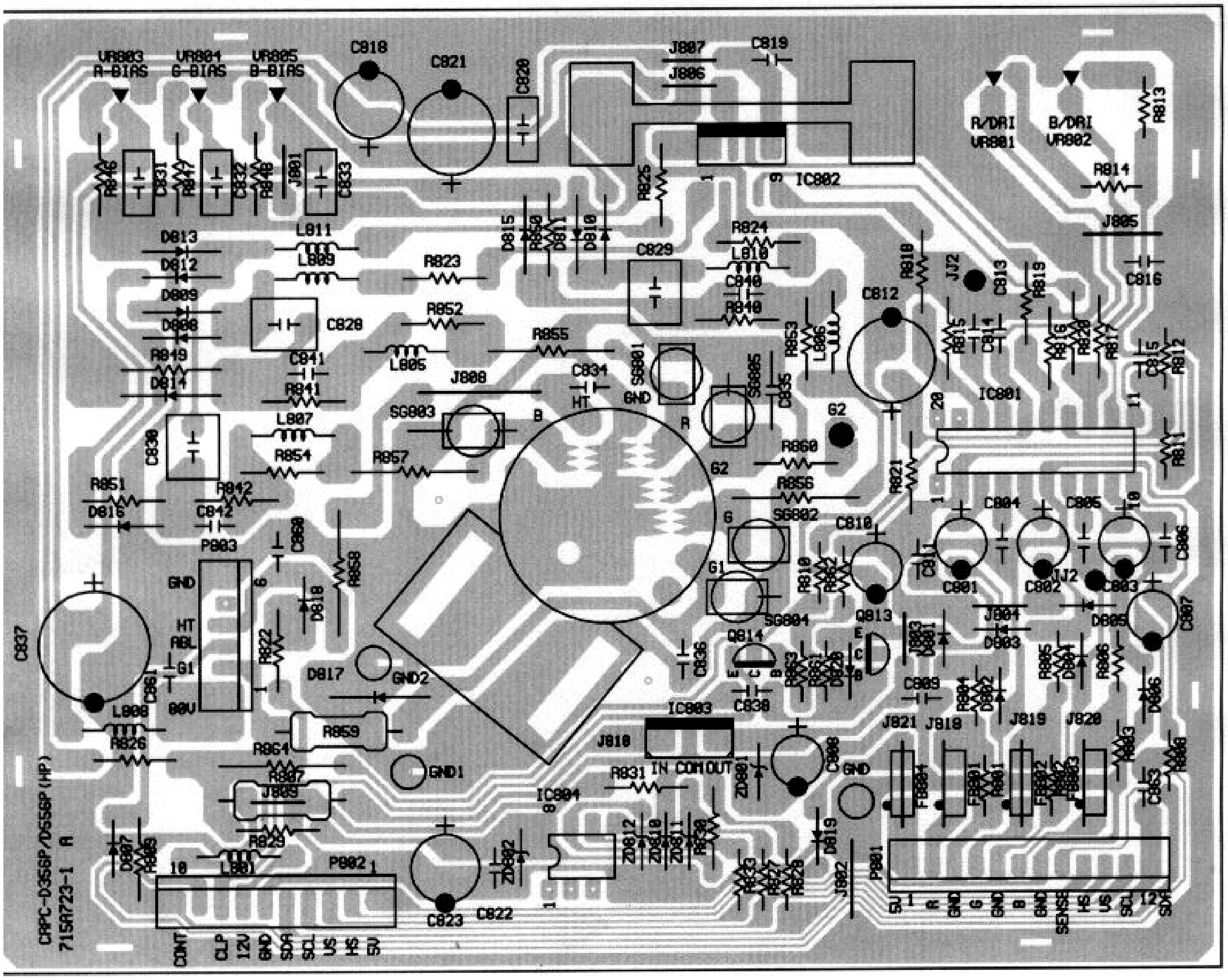

IC401
TDA9111
HGND
VGND
BGND
Vcc
XRAY
COMP
B+OUT
REGIN
Isense
FOCUS
HFOCUSCAP
EWOUT
HOUT
PLL2C
HFLY
C0
R0
HPOSITION
PLL1F
HOUT BUFFER
SAFETY PROCESSOR
B+ CONTROLLER (Internal Reference 7bits)
H-DUTY (7 bits)
PHASE SHIFTER
PHASE COMPARATOR
VCO
PHASE/FREQUENCY COMPARATOR H-PHASE(7 bits)
LOCK/UNLOCK IDENTIFICATION
SYNC PROCESSOR
SYNC INPUT SELECT (1 bit)
HORIZONTAL MOIRE GENERATOR 7BITS+ON/OFF
HFLY
VSYNC
I²C INTERFACE
RESET GENERATOR
S AND C CORRECTION
7 bits
7 bits
VERTICAL DSCILLATOR RAMP GENERATOR
VPOS 7 bits
VAMP 7 bits
GEOMETRY TRACKING
Spin Bal 7bits
Key Bal 7 bits
E/Wpcc 7 bits
Keyst. 7 bits
Amp & Keystone 2X7 bits
VAMP 7 bits
DC
Hsize 7 bits
VERTICAL MOIRE CANCEL 7 BITS+ON/OFF
VSYNC
Vref
Vref
H/HVIN
VSYNCIN
HMOIRE
SDA
SCL
GND
5V
HREF
Vref
Vout
BREATH
Vagccap
Vcap

11 PCB LAYOUT
11-1 MAIN PCB LAYOUT

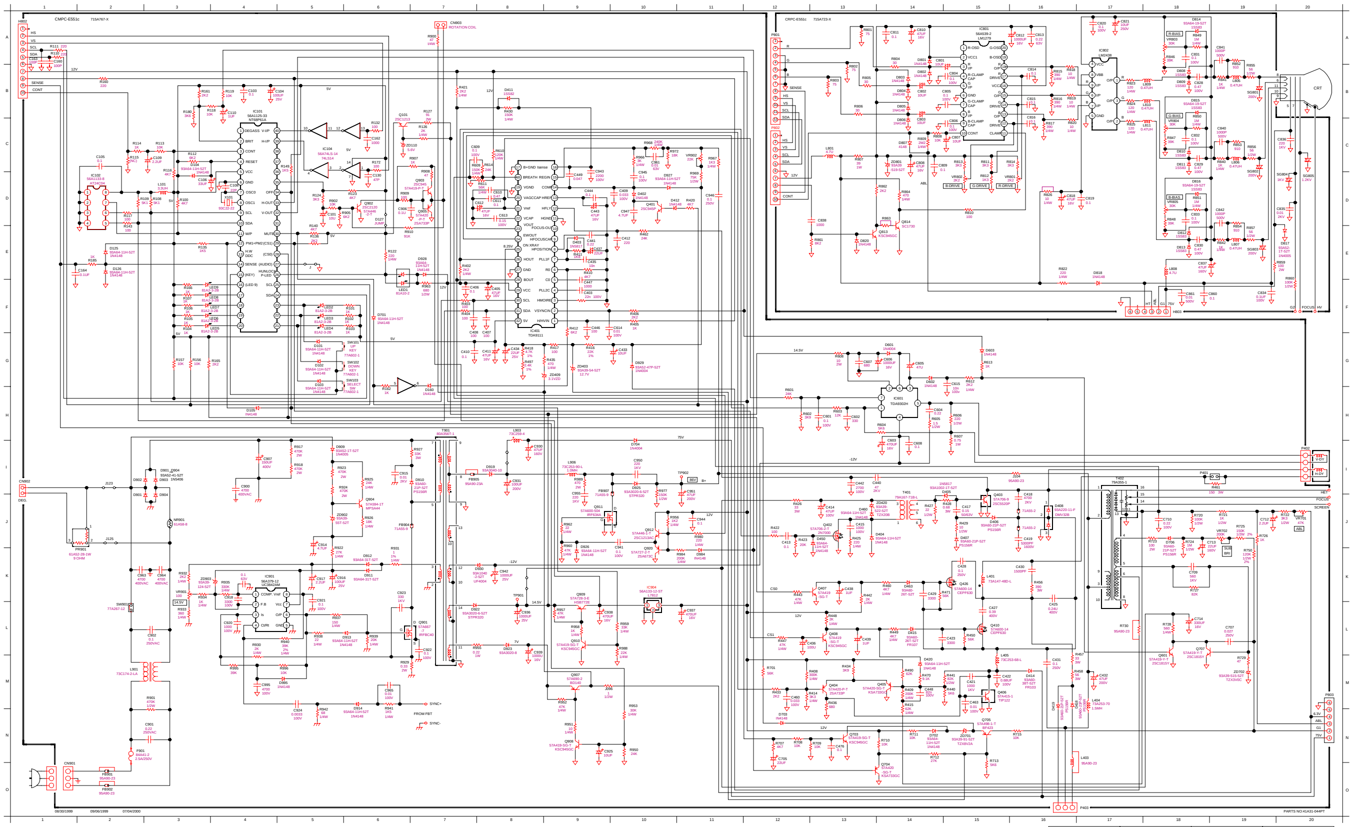


11-2 CRT BOARD LAYOUT

RESERVE FOR CRT BOARD LAYOUT PICURE



12 SCHEMATIC DIAGRAM



	CRT	C418	C419	C430	R409	R456	R461	R470	R490	R606	R607	R609	P404	C422
750A5932-1AV	PHILIPS	4700PF 2KV	5300PF 1.6KV	1500PF 1KV	200K 1/4W	390 3W	JUMPER	9.1K 1/6W	62K 1/6W	220 1/2W	0.75 1W	150K 1/4W	NONE	0.68UF 100V
750A5910-3PS	CHUNGHWA	4700PF 2KV	6800PF 1.6KV	FR155 DIODE	360K 1/4W	270 3W	150 3W	15K 1/6W	47K 1/6W	180 1/2W	0.91 1W	560K 1/4W	3P PLUG	2.2UF 100V
750A5910-3PS-D	CHUNGHWA	4700PF 2KV	6800PF 1.6KV	FR155 DIODE	200K 1/4W	270 3W	150 3W	15K 1/6W	47K 1/6W	180 1/2W	0.91 1W	560K 1/4W	3P PLUG	2.2UF 100V
750A5910-3PS-TQ	CHUNGHWA	4700PF 2KV	6800PF 1.6KV	FR155 DIODE	360K 1/4W	270 3W	150 3W	15K 1/6W	47K 1/6W	180 1/2W	0.91 1W	560K 1/4W	3P PLUG	2.2UF 100V
750A5910-5PS	CHUNGHWA	4300PF 2KV	6800PF 1.6KV	FR155 DIODE	360K 1/4W	270 3W	150 3W	15K 1/6W	47K 1/6W	180 1/2W	0.91 1W	560K 1/4W	3P PLUG	2.2UF 100V
750A5910-7PS	CHUNGHWA	4300PF 2KV	6800PF 1.6KV	FR155 DIODE	200K 1/4W	270 3W	150 3W	15K 1/6W	47K 1/6W	180 1/2W	0.91 1W	560K 1/4W	3P PLUG	2.2UF 100V

MODEL	E551c	DRAWING	M.Y.GU
VERSION	B	CHECKED	
DATE	JUI-24-00	APPROVED	
P/N	D556Q-01-2		